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THE

TWENTY-FIRST REPORT

OF THE

COMMISSIONERS

OF

NATIONAL EDUCATION

IN IRELAND,

(FOR THE YEAR 1854),

WITH APPENDICES.

VOL. II.

Presented to both Houses of Parliament by Command of Her Majesty.

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COMMISSIONERS OF NATIONAL EDUCATION IN IRELAND.

(1854.)

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Reports of District Inspectors on Industrial Schools.

Ballymena.

REPORTS of DISTRICT INSPECTORS on INDUSTRIAL SCHOOLS.

No. 1.—SPECIAL REPORT of JOHN CARLISLE, Esq., District Inspector, on the BALLYMENA INDUSTRIAL NATIONAL SCHOOL.

Ballymena, January 3, 1855.

GENTLEMEN,—In compliance with your instructions, I beg leave to submit the following report upon the Ballymena Female Industrial National School for the year ended the 31st December, 1854.

No change whatever has taken place in the general management of the establishment. The same school-room, the same teachers, and the same school-hours for literary and industrial education continue; and in no essential point is there any difference in school arrangements since former report.

The numbers on the rolls, and in attendance at this date, are classed as follows:—

First Book,	26 on Rolls,	17 present.
Second do.,	13 ,,	9 ,,
Third do.,	6 ,,	4 ,,
Fourth do.,	2 ,,	2 ,,

Of those present, 4	are learning	Simple Rules of Arithmetic.
2	,,	Compound Rules.
6	,,	English Grammar.
10	,,	Geography.
6	,,	Writing on Paper and from Dictation.
32	,,	Plain Sewing.

The highest number on the rolls for the past year, was sixty-seven, and the average attendance thirty-two. Of the forty-seven at present on the rolls twenty-one have been in attendance throughout the year, nineteen of whom have made a very satisfactory proficiency in the literary as well as the industrial department. Those who have left the school are generally employed either at plain sewing, or sewed muslin work, at their homes.

The pupils in attendance are much smaller, as a class, than those of previous years, the average age being only six one-third years—an age below that at which one could expect much aptness or expertness in acquiring industrial training. The larger girls have left, either to assist at home or take work for which they *personally* receive remuneration; and others finding employment, or indifferent to self-improvement, are not forthcoming to fill the vacant places. The consequence has been, that little more than one-half or one-third the usual amount has been derived from the disposal of the children's work during the year.

The same anxiety and attention are manifested by the patrons of the school to render it efficient and useful; and the order, neatness, and conduct of the children, are subjects for congratulation.

The expenditure for the year has been £73 9*s.* 10*d.*, of which £25 have been contributed by the Commissioners of National Education as salary for the teachers. There is still a balance in favour of the School to the amount of £27 18*s.* 1*d.*

I have the honour to be, Gentlemen, your obedient servant,

JOHN CARLISLE, District Inspector.

To the Secretaries,
Education Office, Dublin.

APPENDIX F.

Reports of District Inspectors on Industrial Schools.

Frederick-st.

No. 2.—SPECIAL REPORT of JAMES PATTERSON, Esq., District Inspector, on the FREDERICK-STREET INDUSTRIAL NATIONAL SCHOOL, Belfast.

Belfast, January 6, 1855.

Nature of the School.—The Frederick-street Industrial National School, which has been in operation for nearly eight years, is a Charity School, established for the purpose of rescuing destitute female children from ignorance and misery, by giving them moral, literary, and industrial education, feeding, and, to a considerable extent, clothing them. It is managed by a committee of ladies of different religious persuasions, whose self-denying and efficient exertions on its behalf are worthy of the highest praise. A description, by my predecessor in this district, of the general plan and arrangements of this admirable establishment having appeared more than once in appendices to former reports of the Commissioners, I need not here repeat it.

Number of Pupils, and their destination on leaving.—The number of children (all girls) on the rolls on the 31st December, 1853, was 82 : during the year 1854, 77 having been admitted, and 55 having left, the number on the rolls on 31st December, 1854, was 104. The average daily attendance during 1854 was 80, a number which, in proportion to the total number on the rolls, is extraordinarily large, owing to the observance of rules well adapted to securing regularity of attendance. Of the children who left the School during the year, 7 went to household service; 8 to work in mills; 4 to warerooms; 3 to assist at home; 9 left on account of ill health; 5 removed from Belfast; 2 went to the workhouse; 2 to beg; 1 was dismissed. The cause of the removal of the other 14 is not known.

Their subsequent conduct.—The Committee have had the gratification of learning, that the conduct of the girls in situations, to which they have been from time to time recommended from the School, has been generally excellent.

Length of time spent at School.—Of the 104 who remain on the rolls, all of whom have been within the last few weeks in attendance, 1 entered in the year 1847, 2 in 1848, 5 in 1850, 2 in 1851, 8 in 1852, 24 in 1853, and 62 in 1854. As 77 had been admitted in 1854, it follows that 15 who entered in that year left before the close of it.

Age of Pupils.—The average age of those on the rolls is ten and a-quarter years. Their average age at entrance was nine three-seventh years; consequently the average length of time they have spent at this School has been less than a year.

Condition of their Parents.—Of the 104 children, 10 have lost both parents; 2 have lost their mothers, and been deserted by their fathers; 69 are the children of widows, the mothers of 9 of them being sempstresses, of 9 working in mills, of 15 living by flowering, of 5 by spinning, winding, or weaving, of 1 by keeping lodgers, of 4 by selling vegetables and small wares, of 3 being domestic servants, of 1 a washerwoman, of 17 charwomen, of 3 nurses, and of 2 being supported by sons or sisters: of the remaining 23 children, the fathers of 12 are labourers, of 1 a soldier, of 1 a sailor, of 2 shoemakers, of 1 a rag-man, of 3 porters, of 1 a mat-maker, of 1 a hawker, and of 1 an invalid lately in hospital.

Religious Denominations.—On the 30th of June, 1854, to which date the last religious statistics I have refer, 90 children being on the rolls, 31 belonged to the Established Church, 26 were Presbyterians, and 33 Roman Catholics. I have no reason to suppose that the proportions are now much different.

Moral, Religious, Literary, and Industrial Education.—The children receive moral and religious, literary and industrial education. Their moral training is constantly going on under the kind and watchful attention of the Committee and Teachers.

Literary Instruction.—Their literary instruction comprises reading, writing, and the rudiments of grammar, geography, and arithmetic. Of the 79 children present on the day of my last inspection, 54 were able to read the Board's second or higher books, 10 had begun to learn grammar, 26 geography, 20 writing on paper, 30 the primary rules of arithmetic, and 6 the compound rules and reduction. Allowing for the unavoidable impediments, the literary department has been conducted efficiently.

Industrial Education.—1. *Needlework.*—In the industrial department the children learn to knit, to crochet, to make shirts, baby-linen, and Valenciennes lace, and to make and mend their own clothes. During the year there have been usually 12 learning to knit, crochet, and mark, from 20 to 40 learning to make shirts and baby-linen, from 8 to 15 learning to make lace, and the remainder learning to make and mend their own garments. Their progress in needlework has been generally very fair—in baby-linen and shirt-making it has been extremely good.

2. *Household Work.*—The elder girls are also taught household work, in turns, four being employed at it during the whole day, and ten before school-hours. This work is cleaning rooms, washing clothes, ironing, and cooking.

Time Table.—Half an hour of each Monday, Tuesday, Wednesday, Thursday, and Friday, is devoted to religious instruction, which commences the School business. Three hours are given to literary instruction alone, three to literary instruction and needlework together; and in summer another hour is devoted to needlework alone. On Saturday an hour and a-half is devoted to religious instruction, and three hours to literary and industrial instruction. On that day the children do not remain after dinner.

Financial Affairs.—As the large number of children attending this School receive, besides their education, much or most of their clothing, and three meals a day, their work can do very little towards paying its expenses. For its support during the year ended on the 21st March, 1854, there were received, in voluntary subscriptions, £304 17*s.* 11*d.*, and from the Board of Education, £32 10*s.*, towards salaries of teachers; and books to the value of £4 5*s.* 6*d.*, all of which, besides £100 of the balance on hand from the preceding year, was expended on the school.

Staff of Teachers.—There are four permanent Teachers in the School-room, besides one who has lately been employed, temporarily, in the needlework department. Three of these, as Schoolmistress, Assistant (who is Matron of the house), and Monitress, receive from the Board of Education, respectively, £17, £10, and £5, in addition to the salaries of £25, £31 10*s.*, and £6, which are paid them by the Committee. The fourth is paid by the Committee, without aid from the Board. There are also a cook and a laundress, from whom the girls learn to cook and wash, and who are paid by the Committee. These two, as well as the Schoolmistress and the Matron, have apartments and rations in their house.

JAMES PATTERSON, District Inspector.

The Secretaries, Education Office.

APPENDIX F.

Reports of District Inspectors on Industrial Schools.

Carrickmacross.

No. 3.—SPECIAL REPORT, by THOS. M'ILROY, Esq., District Inspector, on the CARRICKMACROSS CENTRAL FEMALE INDUSTRIAL NATIONAL SCHOOL.

January 6, 1855.

GENTLEMEN,—I beg to submit to you my Special Report on the Carrickmacross Industrial School for the year 1854.

Management.—As stated in former Reports, this School was established in 1849 by Tristram Kennedy, Esq., M.P., then agent for the Marquess of Bath, for the purpose of giving remunerative employment to the poor females of the neighbourhood. Though Mr. Kennedy shortly after ceased to be manager, he continued till the close of the year 1853 to take an active interest in the welfare of the School; and by his assistance in providing materials, and in disposing of the work when executed, contributed very much to its success. The School is now under the management of Wm. S. Trench, Esq., the present agent of the Marquess of Bath.

Teachers.—The late Teacher, Miss Smith, resigned at the close of the year 1853. The School is, at present, conducted by Miss Hamilton, late Workmistress in Broomfield National School. She was appointed by the Manager in March last. During the first two months of the year the School was under the care of the Paid Monitress, who has since been appointed to a school in the south. Miss Hamilton is an active, energetic person, and is well qualified for the situation. She receives £10 per annum from the Manager; her salary from the Board has not yet been fixed.

Species of Work executed.—Lace-work (guipure and applique) is the principal work executed in the School; sewed muslin-work has been introduced to a limited extent. Neither of these appear to be remunerative; the best workers, working twelve hours each day, cannot earn more than four shillings per week; and the majority, even of good workers, not more than two shillings and sixpence per week; besides, they are not employed more than three-fourths of the year. Great difficulty has lately been found in disposing of the work when executed; frequently several months elapse before it is sold, and until then the workers are not paid. Those who cannot afford to wait for payment get orders on some of the shops in the neighbourhood, where, of course, they are charged an exorbitant price for every thing they require.

The value of the lace-work executed during the year was £226 13*s.*, and of sewed muslin-work, £27 12*s.*, amounting in all to £254 5*s.*; of this, only £180 worth has been sold.

Attendance.—The average attendance during the past year was only eighteen, and the highest number on the rolls 116; this number includes the out-door workers; these, however, should not be returned as pupils, as they do not attend the School for instruction.

Literary Instruction.—The Literary Department exists only in name. A few girls are taught to read and write; but the majority receive no literary instruction whatever; in fact, the establishment is a factory, not a school. To render the institution really valuable, a greater portion of time should be set apart for literary instruction, and plain-work and such other industrial employments only introduced as would fit the pupils for their after-position in life.

I am, Gentlemen, your obedient servant,
THOMAS M'ILROY,
District Inspector of National Schools.

The Secretaries, Education Office.

No. 4.—SPECIAL REPORT of SAMUEL ADAIR, Esq., District Inspector, on MILLSTREET INDUSTRIAL NATIONAL SCHOOL.

Macroom, January 27, 1855.

GENTLEMEN,—I beg to submit, for the information of the Commissioners, the following Report on the Industrial Department of the Millstreet Female National School.

As stated in former Reports, the School is attached to the Millstreet Presentation Convent, and is conducted by the ladies of that establishment.

I visited on the 17th instant. I found the house and furniture in good repair, and clean. The arrangements for ventilation, heat, and light, are very good.

During the six months, ended 31st December, 1854, the daily average attendance in the entire School was 190. The highest number on the rolls for the same period is 500.

The hours for industrial teaching are the same as when I last reported, viz., from eleven to one o'clock daily.

All but the very young children learn, at least, plain sewing.

There were—

Present at time of my visit, learning needlework,	153
Average for 1854,	150

The 153 present were thus employed:—

Plain sewing,	95
Embroidery (muslin),	50
Berlin-work,	8
Total,	153

The materials for plain sewing are chiefly supplied by the inhabitants of the town and neighbourhood; the muslin to be embroidered, and the sewing materials for the same, are supplied by the Messrs. Mac Donnell and Co., Belfast and Glasgow. The Berlin-work is done by the pupils for their own use chiefly.

No accounts have been kept of the receipts of the pupils for plain work. The amount received since 1st April, last, for muslin embroidery and glove-making, was £30 10s., viz.:—

	£	s.	d.
For Embroidery (muslin),	19	12	0
,, Glove-making,	10	18	0
Total,	30	10	0

At muslin embroidery the pupils earn from one shilling to two shillings per week.

Glove-making and netting have lately been discontinued from want of sufficient demand for such products.

When I last reported specially on this School, the Industrial Department was carried on in a separate room from that in which the pupils receive their literary instruction; since then it has been found necessary, on account of the limited number of nuns in the convent, and owing to the indisposition of some of them, to have both departments conducted in the same room. The room (on the ground-floor) formerly occupied by the Industrial Class is now used only as a class-room occasionally.

The arrangements mentioned in my Report for 1853, by which those who may choose to remain to work after-hours are allowed to do so, have not been altered.

I have the honour to be, Gentlemen, your obedient servant,

SAMUEL ADAIR, District Inspector.

The Secretaries, Education Office, Dublin.

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No. 5.—SPECIAL REPORT, by J. G. FLEMING, Esq., District Inspector, upon the KINSALE FEMALE INDUSTRIAL NATIONAL SCHOOL.

Cork, March 1, 1855.

GENTLEMEN,—I beg to submit, for the information of the Commissioners, this, my First Special Report upon the Kinsale Girls' Industrial National School for the year ended 31st December, 1854.

This admirable institution was established by the Sisters of Mercy, in August, 1847—a sad epoch in our history—for it was then the consequences of the first general blight of the potato crop were most severely felt, and the benevolent of every persuasion set themselves to work to see how the sufferings of the poorer classes might be mitigated. It will not, I conceive, be deemed irrelevant to the subject of this Report to mention that during the famine years, as they are so justly styled, the loss of the potato crop was followed by more suffering in the maritime or coast districts than in the inland and better-cultivated counties. Hence the misery and wretchedness of the humble class in small, isolated sea-ports such as Kinsale, were, for a time, trying beyond description.

At this melancholy period the Kinsale Industrial School became the source of temporary relief and of future hope to many wretched families, who must have sunk under the difficulties of their position but for the assistance so timely afforded—all kinds of food having reached famine prices, and remunerative employment, especially for young females, being very difficult to be found. When I add, that through the operation of this same school many thousands of pounds have been subsequently circulated among a numerous class of young persons—some of them orphans, and without any other means of support—and that it still continues to supply remunerative employment to all who choose to apply for it, I think the vast good resulting from such an institution can scarcely be overestimated.

I have laid special stress on the large sums paid through the medium of the Kinsale Industrial School to the female poor employed by it. I must not, however, omit noticing the striking amelioration which has taken place in the habits, manners, and even in the appearance of those young persons who, in submitting to its regulations, had, very probably, nothing in view beyond some immediate pecuniary advantage. Their quiet, contented look, clean, neat persons and dress, their punctual attendance at the appointed hours of business, together with the tone of order and discipline which seemed *habitual* to all, are clear indications of that moral training which stamps on the mind lasting impressions for good. We may, at least, conclude that young persons so trained are not likely to follow the example of those idle, slatternly females—unfortunately a numerous class—whose hands never hold a needle, and who could no more cut out or make their own clothes than they could build the cabins in which they live.

I shall conclude these preliminary remarks by observing that a kind forethought regarding the future career and permanent improvement of *all* belonging to the Kinsale School is the distinguishing feature in its arrangements which renders it so worthy of imitation. In it something more than a strict observance of the daily routine of school duty is sought for, and with an earnestness which deserves success. All available means are employed to develop and foster the good qualities of the poor young creatures—very many of them orphans—who have been brought within its happy influence. Their minds are purified by the principles of religion and by the good example of others constantly before their eyes; and it will be their own fault if they fail to reap benefits corresponding to the efforts of their kind instructors.

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Average Attendance, Division of Time, &c.—The Work School is held in a spacious apartment, being seventy-three feet in length, thirty-two feet in width, and thirteen feet in height. It is well lighted and well ventilated, and is used exclusively for the purpose of industrial teaching. But immediately adjoining it there is a smaller room with an excellent gallery, where the *work* pupils assemble when they are required to attend literary or religious instruction—the latter is given every day from a quarter to three till half-past three. Attendance at literary instruction is not enforced, although every inducement is held out to them to devote a short time during the week to the rudimentary branches, *reading, writing*, and *elementary arithmetic.* I examined some of the more grown girls on those branches, and am sorry to add, found them very backward. They could, indeed, read and write, but very imperfectly; and when questioned on the meaning of what they had been reading, their answers were far from satisfactory, and showed how little they understood the subject matter of the lesson.

The Nuns being fully aware of the defects just noticed, were not surprised at the very unsatisfactory result of my examination. They have, I believe, endeavoured to couple literary instruction with industrial training; but in this—notwithstanding their great influence with all placed under their charge—they have failed to succeed. They found, in short, that if attendance at the *literary* school were made obligatory, many of those whom it was desirable to improve by training and good example, would remain at home, and so fall back into their old, idle habits. It was, therefore, deemed more prudent in such cases merely to require attendance at religious instruction—where the religious faith of the parties admitted of it—in the hope that such persons would in time follow the good example of their more intelligent school companions; for I should not omit stating that a class of twenty-eight pupils belonging to the industrial school, willingly devote three-quarters of an hour (daily) to reading and spelling, and the same time to writing and arithmetic.

And, taking all circumstances into consideration, no better course could, I think, have been adopted. The most strenuous advocate for education will surely admit it would be harsh—nay, cruel—to compel poor wretches, in a state of destitution, and whose subsistence wholly depended on their proficiency at the Work School, to devote their attention to any secondary subject, no matter how important in itself, but certainly ill-timed when dealing with the poorest of the poor. The number of such persons now attending the Kinsale Work School amounts to about ninety. Their ages vary from eight to twenty-three years; so that their average age hardly exceeds fifteen years. The gross average attendance at the *industrial* school for the year ended 31st December, 1854, was about 120, their average age being slightly under fifteen years. In addition to those, special members of the industrial class, all attending the literary school, devote two hours of each day to needlework. Many of them earned a considerable sum during the year; but as no separate account has been kept on this head, I am unable to give details. The work school opens at eight, a.m. and closes at four, p.m. during the winter half-year; but during the summer half-year any one who wishes may come in at six a.m., the hour of closing being the same as in winter. At occasional intervals, on a signal given by the Head Teacher, all present join in some beautiful hymn; and the sweetness of their voices, all in perfect harmony, would, I think, be appreciated by the most fastidious critic.

Species of Work executed—Numbers Employed at each Branch.—Crochet, point-lace, sewed muslin, and plain work, are the chief sources

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of employment. Some of the most experienced hands were occasionally engaged with the manufacture of Limerick lace; and for some months about thirty of them earned a good deal at that branch. But in consequence of the decreased demand for that kind of lace, and the difficulty experienced in disposing of it, most of those so employed had to be placed at work of a more remunerative kind. At present there are only 5 working at Limerick lace, while there are 60 at crochet, 20 at point-lace, and 40 at sewed muslin.

The manufacture of artificial flowers was at one time actively carried on, and with great success; but this species of work, although very perfect in delicacy of style and finish, was, after a while, found to pay very badly, and has, therefore, been abandoned.

It should be remembered that the numbers given above refer exclusively to the Industrial School; for, as already stated, many pupils of the Literary School devote a considerable portion of their time to needlework, as a means of support. I shall not, however, give any details on this last-mentioned point, as it is not immediately connected with the main subject of the present Report.

The Nuns very rarely give employment to any who do not attend the School for, at least, some portion of the day. Permission is, however, freely granted to those whose names are entered on the school list, to bring home their work, those only being prohibited from doing so who are not considered sufficiently steady and experienced. I am happy to add that all avail themselves of this advantage to the fullest extent. When returning home on a summer or autumn evening I have frequently noticed parties of girls sitting by the side of a field, or sheltered by some hedge-row, actively engaged in plying their busy needle, and so absorbed by their work as to seem unmindful of the passing hour. Indeed, occasionally I have observed grown women engaged at some delicate branch of needlework, although their hands, hardened by toil and cramped by age, seemed to disqualify them for an employment which, above all others, demands neatness and delicacy of manipulation. But industry and perseverance are powerful auxiliaries in the battle of life, and effect more than is generally imagined.

I have said nothing regarding the beauty of style and extreme neatness of finish which so peculiarly distinguish the work of the Kinsale School, as I am a most indifferent judge of such matters. At the same time, the most unpractised eye could not, I think, avoid noticing the beauty of the patterns, and the accuracy with which they were imitated; but the remunerative prices obtained for the work prove how truly it has been appreciated by the public.

Accounts, specifying sums paid for Work, Salaries of Teachers, &c.—The weekly amount earned by the workers depends on the nature of the branch to which they devote their attention. At crochet, for example, the girls make, on an average, about 4*s.* per week. Some have earned from 6*s.* to 8*s.* weekly at the same work, which would pay better than any other if it were in sufficient demand. The muslin embroidery is the least remunerative branch, and is found to pay very badly. The best hands, however industrious, cannot earn at it more than 3*s.* 6*d.* during the week, according to the scale of prices settled upon by the Scotch agents. Generally speaking, those employed at sewed muslin rarely make more than 3*d.* or 4*d.* daily—very frequently not so much. I may add, however, that the same kind of work, when ordered by persons for their own use, pays much better. A quick, industrious worker, employed in executing such orders, earns from 5*s.* to 6*s.* weekly.

A good deal of plain work was finished during the year. It pays

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something better than the sewed muslin trade, and has this additional advantage, that young persons engaged at it soon become quick and expert in making and cutting-out all the articles of female apparel—a useful accomplishment they would not be likely to learn if kept too constantly at embroidery and other fancy work.

The total expenditure for the year ended 31st December last was as follows :—

Gross amount disbursed, £929 9*s.* 10½*d.*, viz. :—

	£.	*s.*	*d.*
Teachers' Salaries, . . .	36	0	0
Paid to Work Girls, . . .	716	9	4
Paid for Work Materials, . .	177	0	6½
	£929	9	10½

I am unable to give more minute details of the past year's accounts, as the ladies under whose charge the school had been are now absent in the East, having volunteered to act as hospital nurses to our sick and wounded soldiers; and I am consequently left without many points of information, which, I dare say, they would willingly have supplied.

I am, however, authorized to state that the amount realized by the sale of work has covered all expenses; so that there has been no loss on the gross transactions of the year. The institution, during the year 1854, was, consequently, self-supporting.

The Commissioners allow £30 per annum for Teacher's salary; to this sum the Nuns have added £6, making, in all, £36, which is equally divided amongst four of the most skilful and experienced of the work girls belonging to the institution. They are required to keep a vigilant superintendence over the general business of the school, and to instruct young beginners in some branch of needlework. The arrangements being as follow :—

Name of Teacher.	Branch of Work under her Superintendence.	Salary.
Ellen Holland, . . .	Muslin work, . .	£9
Ellen Murphy, . . .	Point-lace, . . .	£9
Judith Hurley, . . .	Plain work, . .	£9
Ellen Croanen, . . .	Limerick lace, . .	£9

The sum of £9 is merely a gratuity for their services as *Monitresses*, and is but a portion of their yearly income, which mainly depends on the value of their own work; and this, owing to their skill and assiduity, brings them remunerative prices.

Concluding Remarks.—The rapid spread of habits of thrift and industry among our Irish female poor—whose ready adaptation to the exigencies of their new position is fully evinced by the successful working of the Kinsale, Cork, and other industrial schools—cannot be too highly appreciated by *all* interested in the permanent welfare of this country. The good conduct and untiring perseverance of the poor girls attached to those work schools, show that they, too, are open to improvement, quick and intelligent in learning what is required of them—possessed, in short, of the valuable qualities which distinguish the energetic child of industry from the lazy and improvident idler. Indeed, the character of the Irish *workman*, as described by Mr. Dargan, equally applies to the Irish *workwoman*; for she, too, "is second to none in generous, honest feeling—in generous, untiring zeal."

It is most satisfactory to know that vast numbers of so deserving a class have been rescued from extreme indigence and misery by the originators and supporters of our industrial schools. A bright path has

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thus been opened to many who might have otherwise sunk into that state of apathetic lethargy which paralyzes the mind, when the remembrance of past suffering is not softened by hopes of a more prosperous future.

How justly these remarks apply to the Kinsale School will be clearly seen when I mention, that through its means several poor orphans, at one time inmates of the union workhouse, have been removed from their sad abode and placed in a position to earn a decent livelihood; and that many other young females have been enabled to emigrate or otherwise better their condition by their earnings at this work school. These are encouraging facts, and show how much can be done for the poor Irish peasant girl—or, better still, what the poor Irish peasant girl may be taught to do for herself.

I remain, Gentlemen, your obedient servant,
J. G. FLEMING,
District Inspector.

To the Secretaries, Education Office.

Mallow.

No. 6.—SPECIAL REPORT by J. G. FLEMING, Esq., District Inspector, on the MALLOW FEMALE INDUSTRIAL NATIONAL SCHOOL.

Cork, February 23, 1855.

GENTLEMEN,—I beg to lay before you, for the information of the Commissioners, this my first Special Report, for the year ended 31st December, 1854, upon the Mallow Girls' Industrial National School.

This institution, which has been in operation during the last four years, has, since the date of its establishment, afforded considerable employment to the industrious female poor of Mallow—a locality which suffered a good deal from the same causes that more or less affected the country in general since the disastrous years of 1848–9.

It has, I believe, been necessary to make great efforts to keep this school from sinking; for, although generously supported by large orders from private parties, interested in its well-doing, little aid has of late been received from the wholesale dealers in the lace and sewed muslin trade, for reasons which I shall presently refer to. I think it can be shown that this absence of support is not to be attributed to want of skill or due attention and perseverance on the part of those employed. It must, however, be matter of sincere regret to all engaged in promoting industrial habits among the poor of Ireland, to find the intelligence and self-reliance of that class, in whom it is most important to encourage such good qualities, unfairly deprived of that reward which is the just recompense of the skilled labourer. But, on the other hand, even the most sanguine must not expect to find the efforts of the industrious followed, in every instance, by satisfactory results; and from what I can learn, there is every hope that the Mallow Work School will in time approximate, in usefulness and extent of operations, to similar institutions, scattered throughout this district, in which the *weekly* payments for needlework usually amount to a considerable sum.

Average Attendance, &c., for the year ended 31st December, 1854, amounted to 64; but during the summer months there were 180 in attendance, in consequence of large orders on hands for silk gloves and muslin embroidery. Many of the poor creatures engaged at the last-mentioned kind of work, hoping to procure a fair remuneration for their time and labour, came some miles every day, with the view of participating in the profits which the patron of the school *expected* to realize from the work then in hands, previously ordered by some wholesale dealers.

Those parties, however, subsequently refused to give the prices for which they stipulated, and insisted upon making reductions, in some cases, to the extent of 30 per cent. on the original contract price; at which reduced rate of payment the *best* workers could not earn more than 2*d.* a day. These reductions were demanded on the ground that the work was imperfectly finished, which being denied by the Manager of the School, the matter was brought before the Recorder's Court, where a verdict was got in favour of the School, with a decree for the full amount which the wholesale dealer had in the first instance promised to pay.

Species of Work executed, Numbers employed, &c.—In consequence of what has been stated in preceding paragraph, muslin embroidery has ceased to be executed in the Mallow Work School for the wholesale dealer; but a good deal of that kind of work is still done for persons requiring it for their own use, and most of the girls who remained at the school have been so employed for the past seven or eight months. There are also thirty or forty of the most skilled hands engaged with crochet and imitation lace-work. Plain work, knitting, &c., also form some source of remuneration for such as cannot be otherwise employed.

In fact, the manager of this school, Rev. J. M'Carthy, has made great exertions, to introduce, for the benefit of those who attend it, as many varieties of work as possible, being satisfied that in no other way can an industrial institution of this kind be kept up. To use his own words, which are worthy of attention, from the experience he has had of the general working of Industrial Schools: "Our attendance varies in proportion as the market for the goods we produce fluctuates. The changes in fashion, the caprice that regulates ladies' dress (the principal object on which female industry is exercised with us), also renders our attendance variable. But we have now so increased the number of our productions that we hope in *every state of the market* to keep a good many employed. Indeed, many of the girls have already learned to work profitably at more than one species of manufacture; but to effect this we procured at considerable expense teachers for their instruction in such branches."

The Head Teacher, Elizabeth O'Brien, educated at Mallow, confines herself exclusively to the work department; but all under her charge (their average age may be set down at about fourteen years) have an opportunity of receiving literary instruction each day, in a room set apart for that purpose. Mere literary instruction, however, is not appreciated by the *very poor* class, on whom the misery of past years has weighed so heavily that they only value what affords them immediate help in their struggle to live.

For this reason, apart from many others which might be adduced, the female children of the humble classes, such as come in greatest numbers to convent and large town schools, should, I think, have an opportunity of passing through a course of industrial training. Under such an arrangement we might reasonably hope to attract to our schools numbers of that class of our youthful female population, which it is most desirable should be brought under moral and religious influences. It is scarcely necessary to add, that the success of such schools must mainly depend upon the exertions and friendly co-operation of local parties, who might, however, reasonably expect some assistance from the Commissioners towards payment of Industrial Teachers' salary."

Statement of Accounts.—The Sisters of Mercy, who conduct the School, keep separate accounts with the girls, whom they pay at the

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end of each week, expecting to be reimbursed when the orders for work are completed and forwarded to the proper destination. A good deal of work is got through by this arrangement, as the young persons employed are thereby induced to use every effort to increase the amount of their weekly earnings, which they are certain to receive *without any unfair deductions* at the stipulated time.

I am not, however, in a position to forward, for the information of the Commissioners, an accurate statement of those accounts, as the Superioress of the Convent declined giving me any specific details on that head. She merely states, that the loss for the last year has been considerable, consequent on the non-fulfilment of contract by sewed muslin dealers, the amount of salary paid Industrial Teachers, and finally, the sums expended on material for beginners to learn on, which, of course, turns to no account. The Manager, however, expresses a hope, that as the Commissioners have now ordered, for the fourth time, an inquiry regarding the working of the Mallow Industrial School, they will at length aid it by their support, of which, he submits, it is deserving, if the efforts already made, and the results realized since its establishment, be taken into consideration.

I remain, Gentlemen, your obedient servant,

J. G. FLEMING,
District Inspector.

The Secretaries, Education Office.

Doneraile.

No. 7.—SPECIAL REPORT by J. G. FLEMING, Esq., District Inspector, on DONERAILE CONVENT INDUSTRIAL NATIONAL SCHOOL.

Cork, February 20, 1855.

GENTLEMEN,—I beg to submit, for the information of the Commissioners, this my First Special Report upon the Doneraile Girls' Industrial School:—

This institution, conducted by the Nuns of the Doneraile Presentation Convent, is altogether separate and distinct from the Literary School, although both departments are under the same roof. This, however, has only been the case since April, 1852. Previous to that date, needlework (plain and fancy) was taught in the ordinary school-room during a portion of the time set apart for secular instruction; the attendance being then mainly composed of children who were sent by their parents, chiefly for the purpose of receiving instruction in those elementary branches which comprise the usual literary course in our Irish National Schools.

Owing, however, to the extreme poverty of the humbler classes in Doneraile and its vicinity, many young females, varying in age from fifteen to twenty-five, earnestly sought permission to attend the sewing school, with the view of qualifying themselves to work at lace, the manufacture of artificial flowers, sewed muslin, &c.; being aware that if skilful in these branches of fancy work, they might expect, with moderate attention and industry, to earn, if not sufficient means of support, at least a respectable sum to aid their parents or other relatives in their weary, arduous struggle with the most pinching poverty.

The patrons of the School were most anxious to aid so deserving a class of applicants for employment; but before any permanent arrangement could be made for their benefit, it was found necessary to procure a suitable apartment in which needlework, in its various branches, should form the *chief* occupation of all who might choose to attend.

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Accordingly, a spacious room, well lighted and ventilated, was selected for the purpose, and supplied with all the necessary furniture, including work-press, seats, &c.; and in this apartment the industrial school has been conducted since April, 1852.

The young persons who attended the School from this date wished to devote their time *exclusively* to needlework, either from indifference to mere intellectual improvement, or from a dislike to be classed with young children when receiving literary instruction, the disparity of age being often very great. But as it too often happened that those grown girls, from previous neglect on their part, were extremely ignorant, it was determined that they would not be permitted to attend the sewing school unless they undertook to devote a portion of their time to mental improvement. Hence, with some few necessary exceptions, all who attend the industrial school are obliged to devote some hours each week to secular and religious instruction—with what beneficial results is shown by their modest, retiring, yet cheerful manner, and by the energy and intelligence they displayed in getting through their daily task.

Attendance of Pupils—Division of Time.—The average attendance of pupils, including those of the Literary School, amounted to 303 for the year ended 31st December, 1854. Strictly speaking, not more than half that number attended the Industrial School; but as plain and fancy work are also taught during a portion of the day in the literary school, the actual numbers receiving instruction in needlework are, as stated above, 303. The actual numbers attending the Industrial in December last were as follows:—Ten above twenty years of age; nineteen above eighteen years of age; forty-nine above thirteen years of age, and thirty-three under twelve years. From this it appears that the average age of the pupils attending the Industrial School is about fourteen years.

As remunerative employment was the main, if not the sole object which induced persons of the ages just given to submit to the confinement and strict discipline of an elementary school, literary instruction was, with reference to them, regarded as only of secondary importance. Accordingly, of the five and a-half hours, viz., ten to half past three, allotted to the general business of the School, they are not required to devote more than one hour to literary instruction, but they may extend the time if they so desire. Few of them, however, care to do so, being anxious to become expert workers, in which case they are permitted to take home their work, although some inconvenience is found to attend this practice, as they often remain away for some days when they have sufficient work to keep them employed.

Those regulations are not rigidly enforced in all cases, nor would it be wise to apply the same strict rule in every instance. In the impoverished district of Doneraile, for example, there are many poor creatures who depend (during the winter months) almost exclusively for their support upon the weekly sum they are able to earn by needlework. In such cases it would be harsh, perhaps unjust, to insist upon attendance at any school, no matter how well organized and efficiently conducted, for every hour so spent, must be abstracted from the time devoted to a remunerative employment, and consequently so much bread snatched from the mouths of the most wretched of the poorer classes. In short, to people living in a state too often bordering on actual starvation, the immediate supply of food to relieve the cravings of hunger, is paramount to every other consideration, and the only object for which they care to struggle.

Nature of Work executed, &c.—Laced work, sewed muslin, manufacture of artificial flowers, and some plain work, including shirt-making, knitting of quilts, &c. Of those branches, sewed muslin gives employment to 104 persons; lace work to 45; the making of artificial flowers, knitting of quilts, &c., occupy those not otherwise employed. The sewed muslin and lace work are contracted for by mercantile establishments that pay for the work soon after it is finished; but owing to extreme competition, and consequent low prices, especially as regards the sewed muslin trade, the profits arising from those branches of industry are meagre and unremunerative, amounting to £170 13*s.* 5*d.* for the year ended 31st December, 1854, a sum sufficiently respectable when put together, but when carried over the space of a year, and divided among several persons, it will be seen that a very small proportion of it will fall to each one's lot.

Fortunately, however, the orders from parties not engaged in trade, together with a vast amount of plain work ordered by charitable persons, have, to some extent, compensated for the deficiency just noticed, when referring to the lace and sewed muslin departments. I am not in a position to state the additional sums received through these channels, but I believe them to be large. In addition to all this, a vast quantity of plain work is made for the use of the poorer children, by those girls whose parents are better circumstanced, and who do not therefore require to be *paid* for their work. In this way, numbers of destitute young creatures are comfortably clad through the assistance of their generous and less impoverished school companions, who are thus taught in early youth to exert themselves in behalf of their poorer neighbours, who, on their part, will receive such assistance with sincere thanks and gratitude, and are more likely to support with patience penury and hardship, when they reflect that those better off in the world have exerted themselves to soften the wretchedness of their position.

Another consideration here presents itself. The young persons employed in this labour of charity are, at the same time, engaged in their own improvement; for while occupied in making frocks and other articles of female apparel, they soon become expert needleworkers, and when leaving school, they are, generally speaking, able *to cut out and make their own clothes.* And this I conceive to be the great test of the usefulness of a *Sewing School,* when speaking of girls whose parents are not pinched by extreme poverty. Such young persons do not require to devote their time to lace work, the manufacture of artificial flowers, &c., as a means of support. They should, therefore, I think, be dissuaded from devoting their time to such branches, which will prove of very little service when they become heads of families, or managers of their own household. Let such persons first be taught to cut out and make their own clothes : this important object once attained, they can, if their tastes so lead them, learn any species of fancy work they please; but the useful should precede the ornamental whenever practicable. This remark does not apply to the poorer class of young females, in whose case what is useful must yield to the necessities of poverty.

It is difficult to understand the drudgery and labour the management of this largely-attended School involves, for in addition to the constant and vigilant attention required on the part of those who superintend the work department, the keeping of the accounts, the sale of work, and an active correspondence, demand a good deal of one's time and attention. All these extra duties are discharged by some of the ladies of the Convent, as their funds do not, I believe, enable them to pay for the services of Assistant-Teachers in the work school, which, up to the present time, has received no aid from the Commissioners towards payment of Industrial Teacher's salary. To this, I beg re-

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spectfully to call the attention of the Commissioners, as I conceive it would be an omission, on my part, to conclude this Report without recommending to their favourable consideration an institution which has conferred and continues to confer, great and lasting benefits upon the humble class of the female population in Doneraile, and its neighbourhood.

I remain, Gentlemen, your obedient servant,

J. G. Fleming,
District Inspector.

The Secretaries, Education Office.

Killarney.

No. 8.—Special Report of Thaddeus Macnamara, Esq., District Inspector, on the Killarney Female Industrial National School.

Killarney, January, 1855.

Gentlemen,—I beg to submit the following Report on the Killarney Industrial School for the year 1854.

Accounts of attendance, distinct from the ordinary school accounts, have not been kept; but it appears that about 180 of the pupils learn plain sewing, and cutting out, &c.; fancy work, as embroidery, &c., are no longer taught. During the year, about the sum of £35 was received for plain work; but exact accounts have not been kept. The girls receive the price of their own work when any money is paid for it. It cannot be said that the Industrial Department has any longer an existence separate from the ordinary Literary School. Plain sewing is taught here as in ordinary female National Schools; the only difference being, that a small portion of the plain sewing in this School is paid for.

I am, Gentlemen, your obedient servant,

Thaddeus Macnamara,
District Inspector.

The Secretaries.

Dingle, Tralee, and Milltown.

Nos. 9, 10, 11.—Special Reports by Bryan Mac Sheehy, Esq., District Inspector, on the Dingle, Tralee, and Milltown Female Industrial National Schools.

Tralee, January, 1855.

Gentlemen,—I have the honour to submit my Report for the year 1854 on the Industrial Schools of this district, namely, Dingle, Tralee, and Milltown, Female Schools.

These establishments, as has been stated in former reports, are severally attached to Convents of the Presentation Order. Their Industrial Departments do not receive any special aid from the Commissioners.

No. 9.—Dingle Female Industrial School.

Instruction in needlework—chiefly in embroidery of muslin—continues to be given for the same length of time daily, and under the same general arrangements as detailed in my Report for 1853; except that Miss Kennedy, the Embroidery Teacher formerly employed, was discontinued a few months since; another teacher had, previously to my visiting on the 13th November last, been engaged to come from

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Dingle, Tralee, and Milltown.

Dundalk, and is probably now in charge of the Industrial Department. She is to receive £26 per annum from the Nuns, who also pay, as before, a monitress, concerned with the work solely.

Attendance.—

Highest number of pupils, literary and industrial, on the rolls of the School during the six months previous to my visit on November 13, 1854,	571
Average daily attendance during the same period,	391
Number on Rolls, 13th November, learning Embroidery,	360
Number present engaged at Embroidery,	230
Number present engaged at Plain Work,	25

Several girls—adults, or nearly so—of the poorest class, come to school solely for the sake of the work, and do not attend the literary classes. I could not ascertain the number of such girls, as their attendance is not separately recorded. There are many others whose literary instruction does not extend beyond reading, or reading and writing.

The absence of an exact demarcation between the sections of scholars who are, and who are not, to go through the full course of literary instruction prescribed in the School, is much to be regretted.

The Receipts continue to increase, although, as I am informed, a serious depression in the trade was felt during part of the year.

	£	s.	d.
Amount received for Sewed Muslin Work, and distributed by the Nuns during the twelve months ended 13th November, 1834,	385	7	3*
Amount received for Plain Work and Knitting,	30	15	0

Forty-five girls have acquired sufficient expertness to enable them to earn, on an average, *two shillings* a week, which is set down as the highest amount now reached.

It must be admitted that the large measure of good effected through the instrumentality of this employment, in diffusing manual skill, with careful and orderly habits, among the female poor, and implanting in them a certain degree of self-reliance, is not unmixed with disadvantage to *literary* education. When, from feelings of compassion for their extreme poverty, a portion of the scholars are allowed to devote their whole time of attendance to work, and when others are not required to attend the classes for grammar, geography, &c., the embroidery, with its attraction of immediate gain, appears to usurp the first place in the thoughts of the pupils. That the very poor class would not attend at all, were such inducement absent, is most true; but it is also certain that the encroachment upon the intellectual business, the inattention to lessons at school, and want of preparation at home, are constantly spreading outside the destitute section of the attendance. This state of things, deeply regretted by the Nuns, seems to have arisen most naturally from the indigence so widely prevalent among the population of town and country.

No. 10.—TRALEE FEMALE SCHOOL.

Industrial education has lately received a new impulse here, in the accession of a special teacher, and a large number of workers. These were transferred to the Convent School in October last from a purely Industrial School, which had been supported since the spring by subscriptions. The workmistress is a native of the North of Ireland, and was engaged to teach embroidery exclusively. This branch of needlework, then, after having been abandoned as unremunerative, has been resumed during the last two or three months. Plain work, shirt-making, &c., continue to be taught as usual to all the children who are old enough to learn them.

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* It is calculated by the ladies, that about £30 out of this sum was earned by persons not attending school, but to whom work was given out from the Convent.

On the day of my special visit, 18th December, 1854.

The number of literary pupils on the rolls was	651
,, ,, present, ...	333

And of those there were 110 on the rolls, and 53 present, who were under instruction in embroidery; and 21 girls present engaged at plain work *for sale*; besides the large number of children *learning* to sew, and making up articles for their own use.

There were also in attendance 70 girls (78 on rolls), who were not receiving literary instruction, having been removed hither from the Industrial Charity School already mentioned. It is intended that all such persons shall be taught to read, when the School shall have been re-opened after Christmas vacation.

	£	s.	d.
The Receipts for Embroidered Work since October 27, amounted to	30	15	10½
The sum earned at Plain Work, including a small quantity on hand, amounted, for the year, to	35	5	8

Of the embroidery workers—

23 are returned as able to earn from	3*s*. 6*d*. to 4*s*. 6*d*.	per week.
41 ,, ,, ,,	2*s*. 6*d*. ,, 3*s*. 6*d*.	,,
93 ,, ,, ,,	1*s*. 6*d*. ,, 2*s*. 6*d*.	,,
The class of plain workers earn about	2*s*. 0*d*.	,,

It is to be borne in mind, that the girls whose work produces the comparatively high returns set forth above, are employed at embroidery during the whole of school-hours, as well as at their homes. I cannot, however, find any explanation of the remarkable difference between the results attained here, and those noticed in the case of Dingle, where the highest earning seems to be only 2*s*. a-week, although there, also, every available moment is devoted to working.

No. 11.—MILLTOWN FEMALE SCHOOL.

The arrangements for industrial instruction have not undergone any change since the date of my last Report; the Nuns and paid monitresses continuing to give instruction in embroidery to a considerable number, and in plain sewing, knitting, &c., to all who are of sufficient age.

I visited on the 5th inst., with the view of forwarding my Report in the time prescribed by your instructions. The School was then closed for the Christmas vacation, which commenced before the day (19th December) on which I had at first proposed to visit. I, however, ascertained the following facts:—

The highest number on the rolls of the School for the previous six months was	445
The average daily attendance during the same period, . .	179
The number on rolls at the end of 1854, ...	322
,, learning embroidery at the end of 1854, . .	70

The hours of attendance remain as formerly reported.

It is an invariable rule in this School, that *every* girl in attendance shall be instructed in *at least* reading and writing. Grown girls, who are attracted by the embroidery, are not required to study grammar, geography, or arithmetic. Industrial business is judiciously and most scrupulously prevented from interfering with the mental culture of the pupils.

Dingle, Tralee, and Milltown.

Patterns and materials for work are received from a wholesale dealer, as in the cases of the Tralee and Dingle Schools.

	£	s.	d.
The Receipts for the year 1854 amounted to	61	12	8
Value of Work now on hands, *nearly finished*, ...	15	0	0
Total for year, ...	£76	12	8

This shows an increase of £40 over the amount for the twelve months last reported on, viz., £35 11*s.* 1*d.*

The rate of earning has not been found to increase during the past year; 2*s.* 8*d.* per week, on an average, is still about the highest amount that can be earned by the most expert worker.

I have the honour to remain, Gentlemen, your obedient servant,

B. MAC SHEEHY,
District Inspector.

The Secretaries, Education Office.

Kenmare.

No. 12.—SPECIAL REPORT of THADDEUS MACNAMARA, Esq., District Inspector, on the KENMARE FEMALE INDUSTRIAL NATIONAL SCHOOL.

Killarney, January 1, 1855.

GENTLEMEN,—I beg to submit the following Report on the Kenmare Industrial School, for the year 1854.

The number of pupils at present on the rolls is seventy, but during the year it has ranged so high as 100. As the winter months advance, the attendance usually diminishes, and reaches a minimum about the present time of the year. For the entire year the average daily attendance amounts to forty. Girls of all ages, between ten and twenty, attend the School; their average age being a little over fourteen. The attendance has been tolerably regular: it may be inferred from the fact that, of the seventy girls whose names appear at present on the register, sixty-five, on an average, spent 119 days at school, out of the 223 actual school days in 1854. The remaining five on the rolls became attendants since January, 1854. All Saturdays being principally devoted to religious instruction—all holidays and vacation days are not taken into account when estimating the average daily attendance. It should be remembered that when girls become tolerably expert at any of the branches of work, they frequently remain at home busily engaged in completing some piece or pattern; and time so occupied is as effectively spent as if they passed it in the school-room, so far as industrial instruction is concerned. This practice is reprehended, however, and prevented as far as possible, for it is most detrimental to religious and literary instruction.

The earnings of the pupils for the year were as follows:—

	£	s.	d.
By Embroidery, ...	32	2	9
,, Guipure, ...	43	1	0
,, Crochet, ...	10	0	8
,, Plain Sewing, ...	5	13	6
	£90	17	11

In addition to these sums of money, each item of which has been accurately entered, the Teacher estimates that about £15 worth of work was earned by the pupils on their own account outside the School. This latter sum, added to the former, makes the receipts for

Kenmare.

the year £105 17*s.* 11*d.* This amount contrasts very favourably with the receipts of other Industrial Schools similarly constituted, even of greater attendance, in different parts of Ireland. According to the arrangements of the time-table, literary instruction is given for two hours daily, viz., from 10 o'clock to 12, the remainder of the school hours viz., from 12 to 4, being devoted to industrial instruction; half an hour is devoted to religious instruction subsequently. In literary studies, though the standard of proficiency is not as high as in ordinary National Schools, a tolerable amount of progress seems to be made. A considerable number of the pupils read and spell pretty well, and their appreciation of the matter of what they read, is moderately intelligent. With grammar and geography the pupils are but scantily acquainted, and the degree of proficiency in arithmetic is by no means high. The hope of emolument being the stimulating motive with the majority of attendants, more satisfactory progress in literary studies could hardly be anticipated.

The aspect of the School, internal and external, is neat, evidencing careful preservation.

The Patron, the Rev. J. O'Sullivan, P.P., of Kenmare, continues to devote his exertions for the success of the School, with the same unabated zeal. During the year he distributed £3 in premiums to the pupils, whose general conduct, progress, and skill, had been most satisfactory. Here I should remark, that his liberality, so substantially evidencing deep interest for the mental and physical welfare of the pupils of this School, has extended to the nine ordinary National Schools under his management, in which, both by the distribution of premiums and clothes, he has vastly contributed to stimulate the energies of the pupils individually, and to make the general attendance more regular.

The channels through which the work is disposed of continue the same. In the summer months, large quantities of the several kinds of fancy work are disposed of to tourists, *en route* either to Killarney or Glengarriff; the prices thus obtained are very remunerating. By the active measures of the patron, in the winter months, a variety of markets are secured. In Cork, Dublin, and, I believe, London, mercantile and private individuals purchase a very considerable amount.

On the whole, the proceedings of the School have been satisfactory, and I trust its benefits will continue to be diffused.

I am, Gentlemen, your obedient servant,

THADDEUS MACNAMARA,
District Inspector.

The Secretaries, Education Office.

Cashel.

No. 13.—SPECIAL REPORT of EUGENE A. CONWELL, Esq., District Inspector, on the CASHEL FEMALE INDUSTRIAL NATIONAL SCHOOL.

Clonmel, 31st January, 1855.

GENTLEMEN,—Having been called upon by your circular of the 9th December last, to furnish to the Office an Annual Report upon Cashel Industrial School, I beg to state that no Industrial Teacher appears to have been paid by the Board since November, 1852—that since that time, but half an hour daily is devoted to needlework, &c.—that the literary and industrial occupations of the pupils have been conducted by the ladies of the Presentation Convent (there being no lay Teacher) in the same manner as in any ordinary Female School—that it has

Cashel.

ceased to be recognised as a separate Industrial School—and that no report has been forwarded upon it as such, by my predecessor, Dr. Clarke, for the year 1853.

Under these circumstances, I have to recommend that it be struck off the list of Industrial Schools, to be reported on yearly.

I have the honour to remain, Gentlemen, your obedient servant,

EUGENE A. CONWELL,
District Inspector.

The Secretaries, Education Office.

Thurles.

No. 14.—SPECIAL REPORT, by EUGENE A. CONWELL, Esq., District Inspector, upon THURLES FEMALE INDUSTRIAL SCHOOL, COUNTY TIPPERARY.

Clonmel, January, 1855.

GENTLEMEN,—Although the object of this School, and the period of its establishment are probably well known, it may be useful to re-state them.

The requisite buildings having been erected on the convent premises, the School was opened in the year 1847, by the Very Rev. Dr. Leahy, President of the College of Thurles, and the Nuns of the Presentation Order in that town, for the purpose of giving employment to the daughters of destitute tradesmen, and to young females who had been discharged from service by the shopkeepers and neighbouring farmers during the famine of that calamitous year.

It was at first a small manufactory of various articles made from hemp, flax, and wool—embracing the several operations of carding, spinning, winding, weaving, &c.—and had formerly three secular teachers for giving instruction in these processes; but latterly this has been discontinued, and the ladies of the convent have taken upon themselves the charge of all the instruction—religious, literary, and industrial—which is given in the school.

The pupils pay nothing in the form of school-fees, and the aid granted by the Commissioners of Education is at present £10 per annum.

The different species of remunerative employment now carried on are, knitting, crochet, embroidery, every description of plain needlework, and washing. Crochet and embroidery collars take from one to eight days to execute, according to the style and pattern. For the collar done in a day the worker receives from *5d.* to *7d.*; for that which takes from five to eight days, from *2s.* to *4s.* Shirts and knitting vary in style and quality; and the prices paid to workers fluctuate accordingly from *4d.* to *3s.* The pupils are allowed to take home their work every day, and also at vacations. About 20 girls of the adjoining Literary School receive wages for their work; and 20 poor women (the parents of some of the pupils) are employed at home at knitting, and earn from 1*s.* 6*d.* to 2*s.* weekly.

A large portion of the work is executed for private orders; the remainder is disposed of to merchants at Cork, Manchester, and London.

Payments are made every Saturday; and though I have not seen the books containing accounts of receipts and disbursements, I can have no doubt of the truthfulness of the return made to me, that the wages for the past year, 1854, amounted to £830, being, on an average, about 3*s.* per week to each girl attending the school.

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Thurles.

Highest number on the rolls at any period during the year,	96
Average number in daily attendance during the year,	80
Number admitted during the year,	42
Number struck off during the year,	35

Of these latter 20 went to service, and 15 emigrated.

I have only been able to visit this interesting School once during the year, on 28th September last, on which day the children present were returned to me as classified in the following manner, viz.:—

Reading the First Book of Lessons,	23
,, Second ,,	30
,, Third ,,	23
Learning the Simple Rules of Arithmetic,	76
,, Elements of Geography,	53
Writing on Slates,	38
,, Paper,	38
Engaged at Plain Sewing,	16
,, Embroidery,	30
,, Crochet,	24
,, Laundry-work,	6

On examination, something more than one-half were found to have mastered the elements of reading; in the other subjects, familiarly known in the great majority of the ordinary National Schools, no progress could be reported; nor was this state of things much to be wondered at, as I was informed that "they entered the School perfectly ignorant with regard both to literary and religious knowledge."

The following is a copy of the time-table which I found in use in the School:—

At	9	o'clock,	Plain Work, Crochet, and Knitting.
,,	10	,,	Reading and Spelling.
,,	11	,,	Religious Instruction.
,,	11½	,,	Plain Work, Crochet, Knitting, Embroidery.
,,	6	,,	Girls are dismissed.

In September last laundry work was introduced, and six girls were engaged at this species of employment on the day of my visit. At a cost of about £20, a separate wash-house has been furnished with tables, tubs, irons, &c., and all the appliances to be found in the generality of the places to which girls go, with a view to make the instruction in this branch of industry as practical as possible, and qualify the girls for service. The articles to be washed are chiefly supplied from the convent and college.

Although the amount of literary instruction imparted is much lower than could be desired, yet, it appears to me important that this kind of School should receive encouragement and support. The young females who attend it are necessarily of the poorest class; they are encouraged to look forward to earnings, rather than to alms, for their future support; and in this way much idleness and consequent poverty are prevented. In the school-room they are cheerfully and usefully occupied during the day; and from the habits of regularity and industry, and the religious and moral instruction acquired in the School, they return to their homes in the evening, carrying with them improved tastes for the observance of the principles of decorum, and impressed with the necessity for general propriety of conduct. Thus are they preserved from falling into that juvenile criminality which is the result of the social habits of the young out of School, rather than of the want of good instruction within. And in considering this question it is worthy of remark, that the statistics of late years largely tend to establish the opinion that *neglected childhood and juvenile crime stand to each other in the relation of cause and effect.*

Thurles.

This School has now been in operation for some years; and from the impression left on my mind after the single official visit I have been able, during the past year, to pay to it, it appears to have been carried on with devoted earnestness on the part of its enlightened and benevolent managers, and with great diligence, talent, and skill, by the lady specially charged with its superintendence.

I have the honour to remain, Gentlemen, your obedient servant,

EUGENE A. CONWELL,
Inspector of National Schools.

The Secretaries,
Education Office, Dublin.

Midleton, Tallow, Youghal, and Fermoy.

Nos. 15, 16, 17, and 18.—SPECIAL REPORTS, by THOMAS O'LOUGHLIN, Esq., District Inspector, on the MIDLETON, TALLOW, YOUGHAL, and FERMOY INDUSTRIAL NATIONAL SCHOOLS.

Lismore, April 6th, 1855.

GENTLEMEN,—I beg to submit my Report for the year 1854 upon the Industrial Schools of Midleton, Tallow, Youghal, and Fermoy. I think it right, however, to inform you that, not having been in charge of this District for more than half the year, I have been obliged to use, to some extent, the returns furnished to me by the managers, instead of those which my own observation would otherwise have enabled me to offer. I premise this, not because the accuracy of these returns can, in any respect, be questioned, but because the responsibility attached to them is one which I ought not to assume.

No. 15.—MIDLETON INDUSTRIAL NATIONAL SCHOOL.

The elegant and spacious building in which this School is held, has lately been erected, at considerable expense, by the religious community of the Presentation Order of Nuns. It stands on the grounds attached to their Convent; and from its elevated position and pleasing appearance, forms one of the most conspicuous and attractive objects in the town or neighbourhood of Midleton. Its situation is eminently suitable and healthful, and further recommends itself by its proximity to the town from which it draws the majority of the pupils who attend at it. The building is capable of accommodating about one thousand children. It contains seven lofty and spacious rooms, well lighted, warmed, and ventilated, unexceptionable in point of neatness and cleanliness, and admirably fitted up with the requisite school furniture and appliances. The basement, or lower story, is divided into three compartments, two of which (measuring 30 feet by 29 feet by 15 feet, and 30 feet by 25 feet by 15 feet) are devoted to the purpose of literary instruction, whilst the third (40 feet by 30 feet by 15 feet) is elegantly fitted up as an Infant School, with gallery, maps, pictorial tablets, &c. This department originally formed a separate School in itself, but during the past year it was amalgamated with the main School. It is still, however, under the care of the trained Teacher, who was formerly paid by the Commissioners, but who, on account of her efficient exertions, has been retained by the Nuns.

The upper story contains four rooms; three of these correspond in dimensions to those below; the fourth, a lobby-room (12 feet by 12 feet by 15 feet), is set apart as a cloak-room. The apartment occupied by the industrial class, is of the same dimensions as that in which the Infant School is held, and is exceedingly well adapted to its purpose.

Excellent and suitable furniture, perfect light and ventilation, simple and judicious business arrangements leave nothing to be desired either for comfort or convenience; but it is the cheerful neatness which greets one at every turn, and the order and regularity which everywhere prevail, that most readily attract attention, and most favourably impress the mind of a stranger. The tidy appearance of the pupils, too, is most gratifying; but this is a feature of the School which many circumstances have conspired to render prominent. Discipline, example, and the most watchful care, on the part of the ladies of the Convent, have all exercised an influence upon it; but that which, in the Industrial Department, has operated most sensibly, is self-interest—not self-interest on moral or sanitary grounds (for that the pupils could not clearly comprehend), but on the ground of direct pecuniary gain. It so happens that a kind of work (a species of embroidery) has been introduced into this School which, while it offers the best hopes of remuneration, requires the greatest possible amount of care in preserving the materials from being soiled or stained. These materials, when furnished to the worker, are of the purest and most brilliant whiteness—such, too, must be the piece of work formed from them, though, perhaps, a fortnight would barely suffice for its completion. How this can be accomplished I need not describe, but it *is* accomplished; and the fact is one which I think I ought to record, for it shows that the reproach which has been so often cast upon the lower orders of the people of this country, though it may attach to the squalor of their poverty, cannot with justice be applied to their natural habits—a conviction which forces itself still more strongly on our minds, when we consider that this very work, which won high compliments from the English merchants, was executed not alone in the neat and tidy National School-room, but in the wretched homes of the work-girls. At worst it shows that, whether want of cleanliness be an acquired or natural defect of character, it is nevertheless capable of being remedied by education and proper training. Industrial Schools, undoubtedly, furnish the strongest inducements and the best field for such training; they have also the advantage of larger numbers to operate upon. But most important of all, they exercise their influence through the best possible medium—the female sex. For home is the theatre of woman's actions—the same home where youth receives its ideas, and manhood its influences—the home which gives (what the philosopher looked for) a point from which the world can be moved. The value of these institutions, therefore, is not to be estimated according to the number of pupils who directly partake of their advantages, but according to the number of *homes* which such pupils influence. From this point of view the following returns for the Midleton School will be read with satisfaction:—

Highest number of names on the rolls at any period during past year, including literary and industrial pupils,	962
Average daily attendance, including do. do.,	638
Highest number of industrial pupils' names on rolls at any period during past year,	200
Average daily attendance of do.,	120
Number of industrial pupils above sixteen years of age, whose names were on the rolls on 31st December, 1854 (about)	60

In reference to the above numbers, it is to be remembered that industrial instruction is not confined exclusively to the comparatively few who are designated "industrial pupils," but is extended to all who are capable of receiving it. To the literary pupils it is of course a mere adjunct, and embraces only such domestic kinds of work as dress-making,

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shirt-making, and knitting. One hour daily snatched from literary business, suffices for instruction in these humble but necessary employments. For the industrial pupils the school-time is analogously apportioned; work, however, engrossing the longer period. Literary instruction they attend to with reluctance and despatch with impatience. The two hours devoted to it are considered as misspent; not because they believe mental education to be worthless, but because it is a luxury which their poverty cannot afford, or will not purchase with the loss of remunerative labour. Similarly do they refuse to learn the less profitable but more useful branches of *work*. Plain sewing or knitting they will not undertake, but they will give every available moment to cambric and muslin embroidery, to Berlin-work and crochet. The first-named of these being the most remunerative kind of fancy work, employs the largest number of hands. As much as 6*s*. or 8*s*. per week can be earned by a skilful and industrious cambric-embroiderer; but as the good workers are comparatively few, and as other less profitable kinds of work are done in the School, these figures could not be taken as an index to the general earnings. Two shillings and sixpence or three shillings per week may be taken as a favourable average for each girl, supposing her to work for twelve hours a-day. It will hardly appear even so much if we compare the average daily attendance of industrial pupils with the gross amount of money paid for their work, viz., £565; but it must be remembered that the foregoing figures represent what they are *able* to earn, rather that what they actually do earn. The net gain in money is shown in the £565, but such a sum (or one ten times as large) gives a very imperfect idea of the other advantages, literary and moral, sanitary and social, which result from such an institution. Time alone will make *them* fully appear.

No. 16.—TALLOW INDUSTRIAL NATIONAL SCHOOL.

It is gratifying to find that the development of the mind has not been sacrificed to even the wonderful dexterity of the hand, which the children of this School have arrived at in the manufacture of lace. Every girl in this School, who is under sixteen years of age, is obliged to attend to all the literary business of her class; while those above that age receive, for the most part, two hours' literary instruction daily. There are some, however, but very few, who do not attend to *any* of the literary business of the School, namely, such as are too advanced in years, and one or two deaf and dumb girls.

Referring to the School records, I am enabled to make out the following returns for the year 1854:—

Highest number on the rolls, including literary and industrial pupils, ...	489
Average daily attendance, including do. do., ...	334
Highest number of industrial pupils whose names appeared on the rolls at any period during past year, ...	170
Average daily attendance of do. (about)	90

Separate records not having been kept for the Literary and Industrial Departments, I can only point to the two last numbers as an approximation of the truth, but as close an approximation as could be made. If they be in any respect incorrect, it is in being unfavourable to the School. On the occasion of a visit of inspection in October last, I found an attendance of 346 children (smaller than at some previous inspections), who were thus distributed:—

Sewing, ...	100
Knitting, ...	78
Lace-making, &c., ...	120

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Midleton, Tallow, Youghal, and Fermoy.

But reverting to the returns given above, I have to point to one remarkable feature of Industrial Schools which they exhibit, viz., the comparatively trifling difference between the highest number of *names* on the rolls and the number of pupils in actual attendance at the School—a circumstance which shows the great regularity with which these Schools are attended. But this will be still more apparent, if we bear in mind that, whereas the 457 in the return alluded to, only refers to the number of *names* on the rolls at the most *favourable* season of the year, the 334 takes account of the pupils in actual attendance during *all* the seasons of the year.

Turning to the kinds of work which occupy the pupils' time and attention, I find that they are various. Pillow or cushion lace, Limerick-lace, crochet, fancy netting, meshwork, and fancy needle-work are a few of the varieties. These, however, are not carried on simultaneously, but have a certain rotation, according to the season of the year, and the demands of the market. Two of them—cushion-lace and Limerick-lace—may be said to be permanent. The former is sometimes suspended to a greater or less extent—the latter not at all. But, as a general rule, cushion-lace, as being more remunerative, attracts a greater number of hands, and for a longer time than any other branch. In the manufacture of Limerick-lace, twenty-three girls are constantly employed, but these are indentured to the Nuns. The permanent earnings of the pupils vary from 1*s.* 6*d.* to 6*s.* per week—about twenty of the cushion-lace makers being able to earn the latter sum. At times, however, when there is a demand for some particular kind of work (such as crochet), even 10*s.* per week has been earned, but, of course, this can scarcely be included in the general order of business. A correct idea of the gross and individual earnings of the pupils, and of the proceeds of each kind of work may be formed from the following returns:—

	£	*s.*	*d.*
Gross amount paid during past year to the workers at Pillow or Cushion lace,	301	0	0
Gross amount paid during past year to the workers at Limerick-lace,	36	14	8
Netting,	20	0	0
Miscellaneous,	14	0	0
Value of work in hand at the close of 1854,	30	0	0
	£401	14	8

which, for an average attendance of ninety pupils, allows a sum of about £4 9*s.* 3¼*d.* to each. This seems small remuneration for the labour of a year; but we must remember that it is earned by mere children (their ages generally ranging from about seven to sixteen years), and that it is accompanied by the benefits of a good education, and of the best possible moral training.

No. 17.—YOUGHAL INDUSTRIAL NATIONAL SCHOOL.

This School, which is held in the same house as when last reported upon, continues to progress satisfactorily. The attendance during the year has been good (considering the circumstances and habits of the population from which the pupils are drawn), and the pecuniary returns are most gratifying. The great exactness with which these latter have been made out, reflects credit on the "Sister" who had charge of them, and enables me to offer precise and reliable information to the Commissioners. The gross attendance of pupils is also very correctly recorded, but separate "rolls" not having been kept for the literary

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and industrial classes, I am unable to offer as precise information in reference to the latter as I would wish. The following, however, may be taken as a sufficiently accurate return :—

Highest number of pupils (literary and industrial) whose names were on the rolls at any period during the past year, .	728
Average daily attendance of do. do., ...	337
Highest number of industrial pupils on the rolls at any period of 1854, ...	160
Average daily attendance of do. do.	120

Of the pupils who form the industrial class, about one-third are above the age of sixteen years. The majority of these attend to literary instruction for two hours daily; some, however, only for one hour, or even less, but these latter are not included in the number on which the Commissioners pay a per centage as salary. With such, the Nuns exercise a discretionary power, instructing all who require it, and who are capable of receiving it; but, in many cases, they find it not only impossible, but impolitic, to attempt to force any thing like even the rudiments of an education into the minds of girls who have grown up to nineteen or twenty years of age, without a knowledge of their alphabet. Efforts for such a purpose would only drive such girls from the Industrial Schools altogether, and thereby cast them back upon society without knowledge of any kind—without hope of attaining it—and, possibly, without the opportunity of saving themselves from vice. Every care, however, is taken to instruct all who are capable of being instructed in literary business. Accordingly, those under sixteen years of age are made to attend to the principal branches taught in the Literary Department for three hours daily; those over that age, who can be induced to do so, for two hours daily; while those who are too old to learn, or whose education is considered sufficient, for *one* hour or less. Those who receive literary instruction for so short a period as one hour, are generally such as are anxious to learn only to read and write; or who, having already obtained a fair education, wish to improve themselves in some particular branch. The hours for industrial instruction vary inversely as those for literary business; the rule being that the pupils are to be engaged at one or other during the whole of school time.

The majority of those receiving instruction in industrial pursuits employ themselves at point-lace and crochet, these being the most remunerative branches. Many, however, are engaged at muslin embroidery and flower-making; and all, both literary and industrial pupils, are instructed in knitting and plain work. The earnings, though large in the aggregate, are individually small; 3*s.* a-week may be set down as a favourable average. A few, indeed, at "point-lace making" can earn as much as 4*s.* a-week, but only by working about twelve hours daily. Crochet would prove much more remunerative if a constant market could be found for it.

The account for work done and money received by the pupils, stands thus :—

	£	*s.*	*d.*
Plain Work, ...	13	17	2
Flowers, ...	7	3	5
Embroidery, ...	54	6	10½
Point-lace and Crochet, ...	614	16	6¼
Value of work in hand, ...	50	0	0
Total, .	£740	3	11¾

For an average attendance of 120 pupils, we will thus have about £6 3*s.* 4*d.* for each; a pretty considerable sum, all things considered.

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No. 18.—FERMOY INDUSTRIAL NATIONAL SCHOOL.

No material change has taken place in the arrangement of this School since last reported upon. The industrial pupils still occupy the same room with the literary classes—a defect which can be remedied only by the erection of additional buildings. The monitress paid by the Commissioners of Education continues, under the guidance of the ladies of the convent, to superintend the Industrial Department. The skill displayed by the pupils, the superior finish of the work, and the elegance of its design, reflect considerable credit on her labours.

The kinds of work are various, but the principal are "imitation point-lace," bead-work, netting, crochet, and muslin-embroidery. The two last being the most remunerative, occupy the greatest number of hands, and receive the greatest share of attention. Probably about two-thirds of the entire number of industrial pupils are engaged in these branches, their individual earnings averaging about 2*s.* 6*d.* or 3*s.* per week. But as no cash account has been kept, nor any separate record of the attendance of literary and industrial pupils, I am not in a position to submit to the Commissioners, sufficiently precise returns as to the gross or individual earnings of the pupils in this School, or as to the numbers who attend at it.

I am, Gentlemen, your obedient servant,

THOMAS O'LOUGHLIN,
District Inspector.

The Secretaries,
Education Office, Dublin.

Central Female Model and Training Schools.

No. 19.—SPECIAL REPORT of MRS. CAMPBELL, Superintendent of the FEMALE TRAINING and CENTRAL MODEL SCHOOLS, on the INDUSTRIAL EDUCATION in those Schools.

GENTLEMEN,—In compliance with your directions that a Report on the state of industrial progress in the Schools under my care should be furnished, I beg to submit the following brief summary.

The numbers attending the Model School as daily pupils continue to be about the same as during previous years, namely, a steady aggregate of about 500 on the rolls, and to this number the attendance may be said to be restricted by the accommodation, it being necessary to reserve convenient space for seventy or eighty teachers usually in progress of training.

The system of instruction, and the general arrangements adopted for industrial teaching, are of the same description and character as those in use during several former years, and which, from the successful results, appear to be much valued by both parents, children, and the public generally. This conclusion is thought to be unavoidably arrived at when it is considered that, notwithstanding the large numbers on the rolls and in attendance, there are generally 200 to 300 applications in arrear from parents for the admission of their children, which are, of course, attended to as vacancies arise, and always in the strict order of the application.

This amount of public appreciation is not supposed to be ascribed exclusively to the success of the industrial teaching, irrespective of the literary value of the School; at the same time it may be observed, that the progress of the children in useful acquirements suited to domestic purposes, and in *industrial tendencies*, brings home to the understanding

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and to the comfort of the parents, very pleasing and practical proofs of their diligence and success at school, and of the habits formed there, and renders their acceptance as apprentices, or their employment as assistants to respectable places of business a matter of easy accomplishment.

The department for teaching plain work, the paramount importance of which is duly felt, continues to receive its usual amount of attention, and is in an equally prosperous state as heretofore; something very nearly approaching to perfection is aimed at in this department, constituting, as it does, the foundation of excellence in every other branch of needlework, but being infinitely superior to all in its general, or rather indispensable, utility. In the course of the past year about £16 have been distributed as rewards among the several children of the plain work and mending classes, capable of competing or producing good samples of work in the usual manner; and in various small sums, according to proficiency, the highest premium not exceeding 6*d.*, and thence down to an almost nominal sum, but which, however small, is yet found to stimulate children to efforts consistent with their years and capabilities.

In connexion with domestic works knitting may be mentioned as a useful branch; it continues to be practised as attentively as heretofore, though now applied chiefly to making stockings for home use; and in the *crochet* kinds, to making warm winter-jackets, rather than to those more fanciful sorts which were in much request during former years, and by which respectable sums were earned by the pupils in supplying shops during the prevalence of those tastes for fancy knitting, and *before* the introduction of *imitations by the loom.*

Netting and straw-platting may be noticed as forming sections of the plain-work department; the former is applicable to many and very useful purposes, whether designed for fishing nets or as covering for fruit trees; or, in the finer kinds, for the more elegant accessories of the apartments of the wealthy. The latter, straw-platting, including a knowledge of Tuscan plat, is taught in a limited way on certain days, as the art, though unlikely to be of much use to the children of a city, may possibly become of value to the teachers of schools in the country. Both these sections are designed chiefly as furnishing the Teachers in Training with the means and the opportunity of making the acquirements.

Of the continued success of the department for teaching cutting-out, and dressmaking, I am enabled to speak with satisfaction, there having been during the year upwards of 258 dresses and garments of various sorts cut-out and made-up by the pupils of the daily school.

The usual amount of success has attended the sewed-muslin or embroidery classes during the last year. The teachers are the same, and the work is supplied by the same manufacturer as heretofore. About £27 have been paid by him for work wrought in this department; while, at the same time, the pupils practising have lost none of the literary advantages of the school; and many have acquired proficiency in a description of work most likely to hold its place in public use and estimation for several years to come, and the present demand for which appears rather on the increase than otherwise.

The practice of worsted or Berlin-wool work has been much discontinued, in an extended way, during the past year, both from the high price of the materials required for the work, but chiefly from the very little real advantage to be gained from it, as an acquirement for the humbler classes. So long as sampler work continues in use in schools, the foundation of worsted work will be laid in the knowledge acquired

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of cross-stitch and other stitches. But, until drawing is so far advanced as to guide the practitioner in the grouping and colouring of flowers, she must adopt the present mechanical process of copying some pattern stitch by stitch.

Most ladies practise this work as an amusement, and, therefore, render the sale to shops, or otherwise, too precarious a matter to engage in, considering the cost of the necessary outlay on materials.

The Teachers in Training, of whom there were in the training establishment during the year 91, have been instructed in these branches also, in the usual manner. The encouragement afforded to the learners, of obtaining any article cut-out and made-up by themselves, at an abatement of the cost price, is still accorded by the Commissioners to both the daily pupils and the Training Teachers, and has its value in acting as a stimulant to the acquirements. The several teachers in the training establishment in the course of the year availed themselves of these advantages, to the extent of 374 articles, cut-out and made-up by themselves.

Drawing is still taught to both the Teachers in Training and the advanced pupils of the school, and with equal success as heretofore. In consequence of the departure of Mrs. Davitt to Melbourne, a change of teachers has taken place in the department, and a lady and gentleman of high artistic capabilities have the direction, under whose united and talented energies, and zeal for the diffusion of good, it will, doubtless, become productive of all the useful results anticipated, and of which it can be rendered capable.

I have the honour to remain, Gentlemen, yours, &c.,

JULIA CAMPBELL,
Superintendent.

To the Secretaries, &c., &c.

St. Peter's.

No. 20.—SPECIAL REPORT of W. MACDERMOTT, Esq., District Inspector, on the ST. PETER'S (Whitefriar-street) INDUSTRIAL NATIONAL SCHOOL.

December, 1854.

GENTLEMEN,—Through the exertions of the Rev. Dr. Spratt, this School was established in January, 1851, in order to diffuse a knowledge of the higher branches of needlework among the humbler classes of females, not only of this School, but of such externs as chose to resort hither for the acquirement of the above essential parts of female education.

The School forms the attic story of the St. Peter's Female National School. It is sixty feet square, and well supplied with all the requirements necessary for its efficient working. Besides a good clock, its furniture consists of seventeen work-tables, and thirty-four forms, equal to accommodate a very considerable attendance.

The highest number on the books for the last twelve months, .	141
The average attendance for the same period, ...	106
Number of workers present, ...	67

who were thus employed :—

Learning Plain-work, ...	15
Embroidery, ...	22
Lace or Tambour-work, ...	10
Knitting, ...	20

The accounts consist of an ordinary National School Report Book, and a large Register, containing the names of all who have become pupils since its establishment.

The Mistress, Barbara Mulligan, has taught in Enniskerry and other Industrial Schools. Her salary is £12 per annum, £8 of which is paid by the Commissioners; the correspondent contributes the remainder.

The supply of work is quite of a chance character; it is supplied by such persons as are in need of the skill or despatch of the workers; but the proceeds arising from that work is of a very small amount indeed, being no more than £1 14*s.* 3*d.* for the last eleven months, and was the results of the labour, exclusively, of the plain and embroidery workers. The highest sum which any of them received during that period was 2*s.* 4½*d.*; the lowest, 1½*d.*

I cannot attribute such results to any migratory or restless disposition said to distinguish the children of the metropolis; but perhaps they can be traced to simpler causes. The time devoted here, and almost in all the Metropolitan Schools, to the acquirement of needlework, is but one hour daily—a period quite too short for any real or pleasing progress; consequently, the children, seeing that they have spent much time profitlessly, become at last indifferent, and produce either bad work or none at all; while the same class of pupils in the provinces daily dedicate a much longer period to needlework than those in Dublin; consequently, the former sooner acquire both skill and facility in the execution of their art, and receive a reward, at least, somewhat commensurate with their ability and application.

Perhaps there is another cause that serves to retard the progress of the industrial female pupils in the Dublin schools.

In the provinces, the ladies of the respective neighbourhoods are, for the most part, regular and zealous in their visits to those schools, creating attention alike on the part of the teacher and the pupil; but in the metropolis, excepting the Convent and a few other schools, they are almost abandoned by female visitors, who would take any interest in the progress of the children. This neglect is the more to be regretted, seeing that nothing is more estimable than to *teach the ignorant,* especially when such teaching is calculated to elevate their humbler sisters in the scale of female usefulness, self-respect, and perhaps independence.

I have the honour to remain, Gentlemen, your obedient servant,

W. MACDERMOTT,

The Secretaries.

Baggot-street.

No. 21.—SPECIAL REPORT of W. MACDERMOTT, Esq., District Inspector, on the BAGGOT-STREET FEMALE INDUSTRIAL NATIONAL SCHOOL.

January, 1855.

GENTLEMEN,—Agreeably to your directions, I forward to you, for the information of the Board, my Special Report on the above School for the past year.

This establishment is under the personal direction of the Sisters of Mercy. The Industrial Department was opened in 1851, in a large and spacious building, well supplied with all the requirements essential to a combined literary and industrial establishment.

The latter branch is carried on in a cheerful and lightsome apartment, measuring 40 feet by 25 feet; there are five other rooms dedicated exclusively to literary instruction.

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Baggot-street.

In the Industrial Department there were present	110	Adults
Average attendance,	130	
Present in the Literary School,	442	

of whom more than two-thirds, or about 300, likewise receive instruction in needlework.

Regulations.—The Industrial Department commences business at half-past eight o'clock each morning;* it closes in summer at six, and four in winter. During this period, the adults, or those who are not attached to the National School, are engaged in shirt and dress making, knitting, and plain work in general; but no fancy work, the latter being found quite unproductive.

The pupils of the National School enter the Industrial Department, by classes, at half-past eight o'clock in the morning, where they remain until half-past eleven, when they pass back to the Literary School, in which they continue until half-past two o'clock, when the more grown girls return to the Industrial Department, and there remain until four o'clock in the evening, employed in the various sorts of needlework already mentioned.

The Teachers are the ladies of the Convent; no paid teachers are at present employed.

The Accounts are merely a register, containing each pupil's name, age, residence, together with the occupation of her parents.

There is no remuneration given to the pupils; the proceeds of the work are applied to the purchase of fresh materials; besides, it forms a part of the funds for the support of the more necessitous pupils, and those adult interns, who receive food, clothing, and shelter, from the Convent.

Judging from my own experience, I believe I am correct in forming the opinion that the Literary Department of this School is inferior to none other in Ireland. I find that the children who have been uniform in their attendance evince a knowledge of their business, which reflects credit on themselves, and their benevolent and highly qualified teachers.

I have the honour to remain, Gentlemen, your obedient servant,

W. MACDERMOTT, District Inspector.

The Secretaries.

No. 22.—SPECIAL REPORT of W. MACDERMOTT, Esq., District Inspector, on the KINGSTOWN FEMALE INDUSTRIAL SCHOOL.

Kingstown.

January, 1855.

GENTLEMEN,—Agreeably to your directions, I lay before you, for the information of the Commissioners, my Report on the Industrial Female School of Kingstown for the last year.

This School is carried on in the same building in which the Female National School is conducted, but not in the same apartment. It is lightsome, properly ventilated, and well suited for the purpose to which it is dedicated.

There were present at my last visit here	10	Adults.
Number on the books,	45	
Average attendance,	30	

Besides these, there were present in the Literary Department 267, about one-half of whom daily receive instruction in needlework.

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* Except on Saturdays, when the Schools are not open.

Kingstown.

Regulations.—The business of the Industrial School commences at nine o'clock in the morning, and closes at three, during which period the adults (those who do not belong to the National School) are engaged at plain and fancy work. The literary pupils of the National School receive instructions in the above branches for three hours daily, that is, by classes or drafts, and at different times of the day.

The Accounts consist merely of an entry in a book, kept specially for the purpose, of the name of each pupil in the School, and the particulars of the piece of work she has got to execute.

The Teachers are the ladies of the Convent of St. Mary's, Kingstown.

The Remuneration.—If the wrought article be sold in the Convent, the worker receives the full price of the article sold, the prime cost of the material being first deducted. If it be not sold in the Convent, there is another mode adopted for the more ready sale of each wrought article: a trustworthy woman is employed by the ladies of the Convent, who give her, at stated times, a basket fully supplied with the various articles they have for sale; with this basket she goes round to the different persons in the vicinage likely to become purchasers of her stock; on her return, she delivers an account of her sales, when, in consideration of her time and labour, she receives 1½*d.* for every 1*s.* she returns for those sales. In this arrangement there is a mutual accommodation to both vender and buyer; for the former it effects one of the great principles of trade—a quick sale; while the latter is spared the time and trouble of going to purchase that abroad which is brought to their own door.

I have the honour to remain, Gentlemen, your obedient servant,

W. MACDERMOTT, District Inspector.

The Secretaries.

Templeorum.

No. 23.—SPECIAL REPORT of JAMES M'LOCHLIN, Esq., District Inspector, upon the TEMPLEORUM FEMALE INDUSTRIAL NATIONAL SCHOOL, County Kilkenny.

Waterford, 5th January, 1855.

GENTLEMEN,—I beg to submit, for the information of the Commissioners of National Education in Ireland, the following, as my Special Report upon the Templeorum Industrial National School.

This School was established in the year 1851, under the Countess of Bessborough, with the view of affording additional facilities for the more effective operation of a system of employment which had for some time previously been devised by her Ladyship, upon behalf of the females resident on the estate of the Right Honourable the Earl of Bessborough.

The management of the scheme has most happily been confided to Mrs. Blackett, to whose untiring zeal in originating the impulse, and gathering around her the scattered industrial resources of the Bessborough estate, may justly be ascribed the great success which has, in this case, attended the experiment of combining industrial with literary education.

From the school accounts, I find the highest number on the rolls of the Literary Department for the year 1854 to be 113, and the average daily attendance 33 pupils. Of this number 45 appear on the rolls of the Industrial School, whose average attendance amounts to 14 daily. These, with nearly 100 young women, who have gone through the various stages of instruction, and finally completed their industrial

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education here, and who are now constantly employed in needlework at home, instead of, as formerly, upon field labour, form the industrial class.

The Industrial Department, which is suitably fitted-up for the purpose, is conducted in a house adjacent to the ordinary National School-house, by Miss Morrissy, whose unremitting attention to her duties, as also the example she sets forth personally of habits of system, order, and cleanliness, reflect much credit upon this Teacher. She is paid by the Board the usual salary of workmistress, viz., £8, receives, in addition, a gratuity of £2 from the Earl of Bessborough, and also £1 yearly from Mrs. Blackett, besides 1*d.* per week, as fees, from pupils whose age exceeds fifteen years. The School is open from 9 to 3 o'clock in winter, and continues in operation up to 4 o'clock during the summer (with an hour's intermission). The arrangements are of such a nature as that whilst the Industrial Class receive one hour's literary instruction in the Female School daily, the Literary Class at the same time, for a like period, repair for instruction in needlework to the Industrial Department.

The nature of the industrial occupation continues to be the same as described in former reports upon the School, viz., embroidery, guipure, imitation Brussels lace, all kinds of plain and fancy needlework; the work, however, now principally in use is that species of embroidery denominated as "*broderie Anglaise.*" The pupils are paid by Mrs. Blackett in full for the work done, according to their respective merits. Taking their earnings upon average for the past year, I find them to range from 1*s.* to 3*s.* weekly, whilst some whose assiduity, proficiency, and skill, are of a higher order, have earned 5*s.* weekly.

During the past year it appears that no less a sum than £360 has been paid by Mrs. Blackett to the district of which this School may be regarded as the centre, as wages for work done by the pupils. This circumstance may, of itself, afford some evidence of the zeal and devotion exercised by this lady towards the social regeneration and moral elevation of the female portion of the humbler classes around her. Through her exertions solely the work is provided and paid for; she it is who furnishes the necessary supplies of work to be done; examines into their respective merits, and, it may be, defects; affixes the proper value upon the article when completed; and makes the necessary arrangements for disposing of them, in effecting which, she is assisted by the Bessborough family and some of her immediate friends in England, from whom also she derives no inconsiderable facilities.

As the intricacies of needlework so far exceed my powers of just comprehension as to forbid me to offer an opinion of my own upon the skilfulness which some of the pupils have acquired in this School, I think I cannot, therefore, adduce stronger evidence in its favour than to mention the fact, that some of the work has found its way to Paris, and that such of it as has been forwarded to England has always obtained a ready sale. As to the specimens which came under my view in the School and elsewhere, I was particularly struck with their singularly clean appearance; and the manager informed me, to my surprise, that the work is never washed till sold, but is generally fit for wear as it comes from the workers' hands. Such, indeed, is the high estimation formed of the work, the greater portion of which is, as I have before intimated, carried home for completion to the cottages of our peasantry, that the manager has generally more orders for it than can well be met with.

There is no separate record kept of that portion of the work actually done in the School; but when the girls are sufficiently instructed, they pursue, as I have already stated, the occupation at their own homes.

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Thus, although the number in actual attendance at the School is comparatively few, there is, nevertheless, no decline in its efficiency of working; for the manager informs me that there are not, at present, many young women in the neighbourhood who have any taste for embroidery, who are not instructed in it. The work improves daily, and the demand for it increases. Girls also leave it occasionally for domestic service of a better kind; but they seldom take to field-work after having attended the Industrial School. On the other hand, several women who have supported themselves for years by the heaviest farm labour, have patiently sat down to learn the use of the needle, and now earn by it a regular, though small maintenance, in a manner more conducive to their health and character.

At the recent public examinations held by me of the Bessborough Schools (twelve of them in number), the knowledge displayed by the children upon a widely-extended field of instruction, with their clean, orderly, and cheerful, yet respectful demeanour, could not fail but to awaken within the bosoms of their parents strong feelings of gratitude for the ample means provided in these establishments for their general improvement; whilst to the other numerous visitors present on these occasions, comprising for the most part the respectability, intelligence, and exalted worth of their respective localities, it must, indeed, have been truly gratifying to observe the deep and anxious solicitude manifested by the Bessborough family in all that pertained to the promotion of the intellectual and moral, as well as social and religious, education of the children and youth upon their estate; the Lady Bessborough herself distributing, as premiums, amongst those who had been most distinguished not so much for superior literary and industrial proficiency as for good conduct and constant application, abiding marks of her ladyship's fostering care and attention.

I am, Gentlemen, your obedient servant,

JAMES M'LOCHLIN,
District Inspector of National Schools.

The Secretaries, Education Office.

Dundalk.

No. 24.—SPECIAL REPORT of F. F. O'CARROLL, Esq., District Inspector, on the DUNDALK INDUSTRIAL NATIONAL SCHOOL.

Drogheda, January 5, 1855.

GENTLEMEN,—As directed by your Circular of the 9th ultimo, I now forward my Report on the Dundalk Industrial School, which I visited on the 13th of December.

The Literary School, of which this is but a branch, has above 800 names on its rolls, and an average attendance of 450. On the day of my inspection there were present, in the three rooms, 406 pupils, viz.:—

In Infant Room,	194;	only 8 of them can sew.
In Senior Room,	200;	here all learn sewing and knitting.
In Industrial Room,	12;	plain and fancy work.
	406	present, of which number 42 were infant boys.

All in the senior-room are taught plain and fancy work for an hour and a-half daily—they are paid weekly. The younger girls are mere beginners, but the more advanced frequently earn 6*d*. a day.

Attached to the senior-room, and communicating with it, is the Industrial School-room. It is large, lofty, and well lighted; forty-five

Dundalk.

feet by twenty-five feet; but the attendance very small for so large a town, and so fine a room. There were only twelve present, nine of whom were employed at stamped muslin, and three at plain-work. The average attendance for the half year, ending July, was only thirty-two; during the same period, fifty was the highest number on the books; and, in July, that number was reduced to thirty-nine. No school accounts have been kept since July for the Industrial Department; neither report-book nor rolls. The sister in charge of the School did not consider it necessary to keep the accounts, as the majority of the workers were already entered on the rolls of the Literary School; however, at my suggestion, the accounts are to be kept in future as they were in former years. Of the pupils who now attend the Industrial Department, sixteen are grown girls. Those sixteen attend the Industrial School only; the others attend the Literary School for an hour and a-half, and then the Industrial until three o'clock.

Ten of the twelve present on the 13th were educated in the Convent School, and two were women who could neither read nor write. The hours are from ten to three on all week days, of which time half an hour is devoted to prayer.

Remuneration.—The best workers can earn, for plain work, 2*s.*; for embroidery on stamped muslin, 3*s.*; for guipure lace, or applique work, 4*s.* a week.

Seventy-two pounds ten shillings was received by the girls for their work in 1853, £58 4*s.* 11*d.* for their work in 1854—chiefly plain work and guipure lace. A good deal more was earned; but, of the workers on stamped muslin, six girls only are paid by the Nuns; the remainder receive their wages for the work done here from the agents of Brown, of Glasgow; and there is no account in the School of the money thus received. I was shown a habit-shirt, worked by a girl in a fortnight, for which she was paid ten shillings. A tolerable hand could work a yard of guipure lace in ten days, and get 5*s.* for it. There are five girls, only, in this Guipure Class, and about as many in the Applique Class.

The girls are allowed to take their work home; and the fact of many preferring their homes to the most comfortable school-rooms may, perhaps, in some degree account for the small attendance. But, I believe, the real cause is the scanty wages which even the best and most patient workers can obtain.

I am, Gentlemen, your obedient servant,

F. F. O'CARROLL, District Inspector.

The Secretaries.

Clonmellon.

No. 25.—SPECIAL REPORT of ROBERT POTTERTON, Esq., District Inspector, on the CLONMELLON INDUSTRIAL NATIONAL SCHOOL.

Trim, January 3, 1855.

GENTLEMEN,—I have the honour to submit, in accordance with your instructions of the 9th ultimo, the following Report on the Industrial Department of the Clonmellon Female National School: in doing so, there exists so very slight occasion to depart, even to the alteration of a few words, from my predecessor's Report of March 4th, 1854, which is, at once, succinct and explicit (being ample in detail, and concise in expression), that I deem it most advisable merely to refer to such paragraphs therein, in their numerical order, as require any modification or elucidation of statement. The remaining paragraphs, which constitute, too, as will be seen, nearly the entire of the report alluded

Clonmellon.

to, present the clearest, best, and most correct picture possible of the actual and highly satisfactory working of the Industrial Department of the School in question for the year 1854 equally as for 1853.

Paragraph 4.—"The time devoted to needlework by each class is not permitted to exceed two hours." The actual arrangement is as follows:—

Monday to Friday, inclusive, from ten to twelve o'clock.—First Class, engaged at plain work under the Mistress, paid by Lady Chapman; and at the same time Third and Fourth Classes embroider under the superintendence of the Mistress, paid by the Board. From one to three o'clock.—Second Class (including Sequels), in two divisions, with the Teachers, respectively, of plain and fancy work.

On Saturdays, from ten to twelve o'clock.—Third and Fourth Classes embroider, while the junior classes attend exclusively to literary business, being engaged in the repetition of the week's studies.

Hence it appears that the children must attain a certain degree of proficiency, not merely in plain work, but also in their literary business, before they are eligible for promotion to the Embroidery Class.

Paragraph 9.—At the close of the year 1854 the number on the rolls was 84; average attendance of general pupils, 43; of embroiderers, about 29. Hence it appears that there has been a higher average attendance, both of general pupils and of embroiderers, for the past year, though the number on the rolls was considerably less than in the previous year.

This simple fact speaks very well, directly, for improved regularity of attendance; and indirectly, and very forcibly too, for the progress made during that period, the latter being almost invariably a necessary consequence, morally speaking, of the former.

In all other respects my predecessor's Report already adverted to, and to which I again beg to refer you, furnishes a very full and complete description of the operation of the Industrial Department of the Clonmellon Female National School.

I have the honour to remain, Gentlemen, your obedient servant,

ROBERT POTTERTON, District Inspector.

The Secretaries.

Rahoon, Newtownsmyth, and Claddagh Piscatory.

Nos. 26, 27, 28.—SPECIAL REPORT of JOHN E. SHERIDAN, Esq., District Inspector, on the RAHOON and NEWTOWNSMYTH INDUSTRIAL NATIONAL SCHOOLS, and CLADDAGH PISCATORY SCHOOL.

Galway, January 20, 1855.

GENTLEMEN,—In compliance with your instructions of the 9th ult., I have the honour to transmit, for the information of the Commissioners, this my Report for the year 1854, upon the three Industrial Schools of this district, which are all situate in the town of Galway.

No. 26.—THE RAHOON INDUSTRIAL SCHOOL

Is conducted by Nuns of the Presentation Order; and under the immediate superintendence of these ladies, assisted by a workmistress, paid out of the funds of the community, every branch of plain and ornamental needlework, including muslin-work, shirt-making, and dress-making, is taught to the poor children that attend the School.

During the past year I inspected it three times, viz., on the 18th of January, the 11th of May, and the 1st of December; and the numbers present learning needlework on these occasions, were respectively, 120,

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Rahoon, Newtownsmyth, and Claddagh Piscatory.

139, and 422, very many of whom evinced great expertness, particularly in embroidery.

From these numbers it appears that this School has made wonderful progress during the year; but as no account whatever is kept of the children's earnings, although all that they earn is paid to themselves, nor *separate* accounts of the proficiency and attendance of those frequenting the Industrial Department, these being absorbed in the general accounts of the School, I regret it is not in my power to furnish any further details. I have recently, however, taken the liberty of offering to the good ladies of the Convent such suggestions as, I trust, if they find it convenient to carry them out, will lead to a more satisfactory organization, and a more systematic management of this long established and most useful School.

No. 27.—THE NEWTOWNSMYTH INDUSTRIAL SCHOOL

Is conducted by the Sisters of Mercy; and like all the institutions under the management of Nuns of that order, is remarkable for system, cleanliness, and efficiency. Their school-rooms and work-rooms are spacious and comfortable, well lighted, well ventilated, and suitably furnished; and their entire establishment is a model of neatness and order.

There are three departments, styled respectively, the School, the House of Mercy, and the Repository; and at my last inspection, on the 30th of November, 1854, there were present:—

In the School, 222 girls, of whom 132 were learning needlework; the branches taught being, plain sewing, knitting, sampler, and muslin-work. The earnings of these children are very trifling, most of them being employed, during the time devoted to needlework, in making or mending their own clothes, or in working material brought from their homes.

In the House of Mercy, 30 young women engaged at needlework, washing, mending, plain cooking, &c., with a view to their becoming domestic servants. Their earnings go towards the support of this part of the establishment, and towards providing their outfits when they obtain situations.

In the Repository, 18 girls learning every species of dress-making and millinery. These were all regularly indentured apprentices, the term of their apprenticeship varying from two to four years.

The religious instruction of all is carefully attended to; but hitherto literary instruction has been in a great measure confined to the first department, which is the only one connected with the Board of National Education. I have reason to believe, however, that henceforth, in kind compliance with a suggestion of mine, a certain amount of literary instruction will be given in the other departments every day, and in *strict accordance with the Commissioners' rules.*

No. 28.—THE CLADDAGH PISCATORY SCHOOL

Is managed, under the auspices of a committee, by the Rev. J. D. Folan, its patron, to whose exertions its establishment is chiefly due.

During the early part of the past year, there were twelve young women employed, under the superintendence of a master net-maker, in manufacturing nets, and spinning flax and hemp into thread and twine; and their earnings varied, according to their expertness and the value of the work at which they were engaged, from 2*s.* 6*d.* to 7*s.* 6*d.* a week.

In the beginning of May, however, work was suspended, partly in consequence of the high price of hemp and flax, and partly owing to

Rahoon, Newtownsmyth, and Claddagh Piscatory.

there being a large stock of nets on hands, and was not resumed until the beginning of last December, since which date there have been eight young women employed in making herring-nets; their earnings being, on an average, about 3*s.* 4*d.* a week each.

During the interval of suspension, a large portion of the stock on hands, consisting of trawl and herring nets, was disposed of, to the value of £128 12*s.* 6*d.*, to fishermen, chiefly those of the Claddagh, who, were it not for this timely aid would have been utterly unable to take advantage of the remarkably abundant shoals of herrings that visited our coasts during the year.

As stated in my last Report, the only branch of industry taught in this School is the manufacture of various kinds of fishing nets; and young women are the only persons employed in it. But the Commissioners and the public will be apt to form a very erroneous judgment of the advantages derivable from this little factory (for such it really is), if they do not bear in mind that it was established and is maintained, not at all to give employment to the young people of the village in which it is situate, but solely for the purpose of improving the condition of the fishermen of the locality, by supplying them with nets of the best quality, and at a very reasonable cost.

I have the honour to be, Gentlemen, your obedient servant,

JOHN E. SHERIDAN,
Inspector of National Schools.

The Secretaries, Education Office,
Dublin.

St. Vincent's.

No. 29.—SPECIAL REPORT of J. M'SWEENY, Esq., District Inspector, on the ST. VINCENT'S INDUSTRIAL NATIONAL SCHOOL.

Gort, March 6, 1855.

GENTLEMEN,—I beg leave to lay before you this, my Third Report, upon the St. Vincent's Industrial School. The working of the School has now been tested by three years' trial; and the result is a gradual decline in the number of pupils, and a want of confidence in the accomplishment of the object for which it was established, viz., to create an industrial spirit among the poorer classes of the town in which it is situated.

In March, 1853, there were 24 pupils present on the day of my visit; in March, 1854, there were 22; in March, 1855, there were only 15 pupils.

The industrial work at present consists in embroidering muslin; and to the very small wages which the pupils can earn, may be attributed the falling-off in the attendance.

Of the 15 pupils present to-day 6 were able to earn 2*s.* per week, and the remaining 9 could earn but 1*s.*

In the literary department 7 pupils could read Book No. 4, and tell the meaning of the difficult words in the lessons; to write a simple sentence from dictation with perfect accuracy is a task beyond their power; the remaining 8 were learning to read in Books No. 2 and 3; all the pupils are able to write upon slates; and this comprises the whole course of study.

This establishment consists at present of three departments, viz., the Literary School, which was transferred to the second story since my last visit, and the Industrial and the Infant Schools, which occupy the ground-floor room. A suitable gallery has been erected at one end of

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St. Vincent's.

this room for the accommodation of the infants; the Industrial class find ample room round one work-table at the opposite end.

There is no separate record of the attendance in either department; all are kept in one Register and one Daily Report Book.

For the year ending February, 1855, 212 is the number on the rolls; 112 is the average attendance; 128 is the number present to-day.

This shows a moderate increase in the attendance of the whole school, to effect which, a zeal that never tires, and a vigilance that never relaxes, are exercised by the Nuns in the moral training and literary instruction of the pupils.

I have the honour to remain, Gentlemen, your obedient servant,

J. M'SWEENY.

The Secretaries, Education Office,
Dublin.

No. 30.—SPECIAL REPORT of A. O'CALLAGHAN, Esq., District Inspector, on the SLIGO FEMALE (No. 2) INDUSTRIAL NATIONAL SCHOOL.

Sligo.

Manorhamilton, February, 1855.

GENTLEMEN,—I have the honour to submit, for the consideration of the Commissioners, the following Report.

This School is conducted by the Sisters of Mercy of St. Patrick's Convent, who most successfully themselves discharge the duties of teachers, both in the literary and the industrial departments.

Industrial instruction is given in the same room in which the literary business is conducted; the room is remarkably spacious, being also well lighted and ventilated, and is deserving of special notice on account of its appearance, suitable furniture, and neat and orderly arrangements.

On my last visit I found, with extreme regret, that this School had received, some time previously, a severe check from the prevalence of fever in the adjoining Convent; and that, in consequence, the Sisters of Mercy had been obliged to suspend the business of the School for a considerable period. Notwithstanding, however, the adverse influence of such an event, I found, in attendance, on this visit, which was made a few weeks only after the re-opening of the School, 51 female children, of whom 33 were engaged in learning needlework—a gratifying fact, inasmuch as the latter number bears an unusually large ratio to the number representing the whole attendance for that day; and also as it shows what was really the fact, that all the female pupils whose age or literary knowledge made it suitable, were receiving industrial instruction.

Arrangements of the Time Table.—These have been judiciously made, and provide for the moral, literary, and industrial instruction of the children; moral and literary instruction is given from ten to half-past one o'clock; industrial instruction is given from half-past one to three o'clock.

Descriptions of Needlework.—These include plain sewing, knitting, and various kinds of embroidery on muslin, and also crochet-work. Latterly, however, plain sewing has received a decided prominence amongst them, and the work classes are mostly employed in the fitting and making of various sorts of dress—shirts, frocks, &c. The Sisters of Mercy, in giving this predominance to the plain kinds of work, suited to the ordinary requirements of domestic life, are influenced by consideration of the probable position—as servants in families—to be

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Sligo.

occupied by most of these children in afterlife; and are, therefore, solicitous to adapt as well their literary culture as, more especially, their industrial requirements to the ordinary wants of their expected situations. There seems to me much good sense in this view, which certainly offers strong ground for the preference thus given in this institution to the useful and common over the merely ornamental kind of needlework; the depreciation, too, which the beginning of the present year witnessed in the value of embroidered muslin, indicating, perhaps, an uncertain prosperity of a branch of industry which, for several years, has been an important source of employment amongst the poorer classes, seems to justify the practical views to which I have adverted.

Remuneration.—The rate of payment for shirt-making, which at present chiefly engages the pupils, is about 4*s.* per dozen; the materials are supplied by a large establishment in Glasgow.

General Instruction.—Before closing my Report I am desirous of referring to this head: in my last Report on this School I remarked that, amidst the employment of the children in industrial pursuits, their mental improvement was amply provided for; that there has been no decline in this important respect, the following figures afford satisfactory evidence:—

Of the 51 girls present on my visit, a large number read with remarkable intelligence.

29	were learning	English Grammar.
20	,,	Geography.
29	,,	Simple Rules (Arithmetic.)
16	,,	Compound Rules.
4	,,	Proportion and Practice.
35	,,	Writing on Paper.
16	,,	,, on Slates.

I wish to call attention to the large proportion of the whole attendance engaged in learning arithmetic, writing, and grammar; this gives a result as gratifying as it is unusual, and, combined with the fair character of the answering, presents a safe test of the flourishing condition of the School, and supplies undeniable evidence of the skill, the labour, and the rare devotion of the benevolent teachers.

I have the honour to be, Gentlemen, your very obedient servant,

ANDW. O'CALLAGHAN, District Inspector.

The Secretaries, Education Office.

High-street, Newry.

No. 31.—SPECIAL REPORT of ALEX. J. SIMPSON, Esq., District Inspector, on the HIGH-STREET (Newry) INDUSTRIAL NATIONAL SCHOOL.

Newry, January 25, 1855.

GENTLEMEN,—I have the honour of submitting to you my first Report on the Industrial Department of High-street (Newry) National School, which, as you are aware, is under the patronage of the Right Rev. Dr. Blake, and presided over by the ladies of the Convent of St. Clare.

The Industrial School has been but a year recognised by the Board; consequently no comparison can be instituted between its working in 1854, and previously. But a large amount of good must be effected by thus training up in habits of order, implanting principles of morality and religion, and affording such instruction as will enable them to earn their subsistence in afterlife, to so many of the very poor of the locality—none but the poorest attending this department.

The School opens each morning at nine o'clock, and the girls are

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required to learn writing till ten; from one till two is set apart for literary, from two till half-past two, for religious instruction, and the remainder of the day is devoted to needlework, &c., one or more of the ladies of the Convent constantly presiding, and exercising over the girls that moral control so essential to progress.

The School-room is a comfortable apartment, detached from the main building of the Convent, but within the walls, and quite suitable for the present attendance.

During the hour and a-half—from one till half-past two—not occupied in industrial instruction, the paid teacher attends in the ordinary school, where there are from 250 to 300 girls, and gives instruction in embroidery and plain and fancy work.

The teacher first paid by the Board, Anne Gleeson, having fallen into a delicate state of health, resigned on the 1st November, 1854, and on the same day Anne Corr, who has been educated at the Clones Industrial School, county Monaghan, and who seems in every respect suited to discharge the duties of her office, was appointed.

At present the work is confined to knitting, shirt-making, dress-making, embroidery, netting, and crochet; and few of the girls remain after having acquired such knowledge of these branches, or any of them, as enable them to procure employment. Those who have but commenced are employed in making coarse garments, the materials for which are supplied by the ladies of the Convent, for distribution among the poor.

A great difficulty exists in procuring work of a remunerative kind, the highest weekly wages acquirable from muslin-work being *5s.*, and the average under *3s.*

The accounts of proficiency, attendance, nature of the work, and remuneration, have not been kept with sufficient accuracy, the ordinary register not affording columns for the purpose; and I would suggest the necessity of having a particular form of register for the use of Industrial Schools drawn up, in which should be exhibited the attainments of pupils on entering, progress during stay, number of pieces of work done, description of work, how disposed of, and at what remuneration to the pupil.

I subjoin a statistical table.

Present on 8th January, 1855,	30*
Highest on rolls for the year,	44
On rolls on 8th January,	38
Average for nine months,	22·3
Highest age of pupils,	21
Lowest do.,	10
Average do.,	16·5
Number of orphans on rolls,	23

I have the honour to be your most obedient servant,

ALEX. JNO. SIMPSON, District Inspector.

The Secretaries, Education Office.

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[*] Of 30 girls present on the 8th January, 1855, when I visited, there were learning knitting, 2; shirt-making, 3; muslin embroidery, 15; and crochet-work, 10.

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The Commissioners have considered it desirable that an opportunity should be afforded to the Head Inspectors of stating in their Annual Reports their views upon various matters relating to the working of the National System in their respective Districts, and, incidentally, upon the subject of elementary education in different parts of Ireland; but the Commissioners wish it to be distinctly understood, that they do not hold themselves responsible for the opinions expressed in the following Reports, nor do they feel called upon to adopt all the suggestions which they contain.

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I. Reports on District Model Schools.

I.—HEAD and DISTRICT INSPECTORS' REPORTS on DISTRICT MODEL SCHOOLS.

Bailieborough.

No. 1.—JOINT REPORT, on the BAILIEBOROUGH DISTRICT MODEL SCHOOL, for the year 1854, by JAMES PATTEN, Esq., M.D., M.R.I.A., Head Inspector, and THOMAS M'ILROY, Esq., District Inspector.

March, 1855.

GENTLEMEN,—We beg to submit to you, for the information of the Commissioners, the following Report on the Bailieboro' District Model School, for the year ended December, 1854.

Attendance.—The number on the Rolls for the past year was 176 boys and 154 girls. This, compared with last Report, shows a slight decrease, owing to the severity of the weather in the beginning of the year, and the prevalence of measles and hooping-cough in the neighbourhood during the summer. The system of payment of school fees in advance, which has been more strictly enforced than heretofore, has caused greater regularity of attendance. In the Male Department, for every 100 pupils on the Roll, the average attendance was 74·8; and in the Female Department, 74·7, or nearly three-fourths of the average number on the Rolls. See Appendix A, Table 1.

Of those receiving instruction during the past year, thirty-five came from considerable distances, and were obliged to take lodgings in the town and neighbourhood, for the purpose of attending the school; besides these, thirty-six others came distances varying from two to five miles. We cannot offer a better proof of the high character which the school has acquired, and the desire of parents to procure for their children the benefits which it affords.

Number admitted and struck off during the year.—In the Male Department fifty pupils were admitted during the year, while the number permanently struck off was fifty-six. Of these—

12 left the neighbourhood.
2 emigrated.
1 appointed as Agricultural Pupil Boarder.
2 appointed as Pupil-Teachers.
3 apprenticed to shopkeepers.
1 left from sickness.
29 employed at various home occupations.
6 struck off for irregularity of attendance.

In the Female Department the number of admissions was fifty-seven, while the number permanently struck off was sixty. Of this number—

8 left the neighbourhood.
4 emigrated.
1 appointed as Teacher in a National School.
2 appointed as Paid Monitresses.
2 left to assist in their fathers' shops.
5 left from sickness.
2 died.
20 employed at various home occupations.
16 struck off for irregularity of attendance.

Occupation of Parents, &c.—In Table 2, Appendix A, are given the various occupations of the parents, with the number of children belonging to each on the Roll at the close of the year. From that table it will be seen that every grade in the community, from the labourer and small farmer up to those in the most comfortable circumstances, avail themselves of the benefits of the institution. There is, however, a considerable portion of the population to whom even the lowest rate of payment would be a consideration, and who are, in consequence, excluded from participating in these benefits, as their admission, without payment, would tend to lessen the general utility of the school, and to destroy its efficiency as a training establishment. A school for this class, the want of which has long been felt by those who take an interest in the improvement of the social condition of the poor, is about to be established, in connexion with the Board, under the patronage of Lady Young and Lady Olivia Fitzpatrick. Much praise is due to these ladies for their active and benevolent exertions in this matter.

Religious Denominations, &c.—One of the most gratifying features in this Establishment is the mixed character of the attendance, and the cordial feeling which prevails—every creed in the neighbourhood being fairly represented. The following table shows the number of children of each religious denomination on the roll at the close of the year:—

	Boys.	Girls.	Total.
Established Church, ...	22	16	38
Roman Catholics, ...	43	33	76
Presbyterians, ...	13	19	32
Totals, . .	78	68	146

Religious Instruction.—No change has been made in the arrangements for the religious instruction of the children. The Clergymen of the different denominations continue to attend as heretofore, and still exhibit the same lively interest in the welfare of the School which they have on all occasions manifested.

School Fees, &c.—The amount of school fees received during the year was £57 6*s.* 10*d.* This, when compared with the attendance, is a larger sum than was received during any year since the opening of the establishment. The amount received for school requisites purchased by the children was £13 2*s.* 11*d.*, showing a considerable increase on the sales of last year. In Table 1, Appendix A, is given the amount of school fees received and the amount for school requisites purchased in every month during the year.

Teachers.—The Teachers who were appointed at the opening of the establishment are still in charge. They continue to exert themselves with commendable zeal, intelligence, and energy, and, as the increasing prosperity of the School shows, to the great satisfaction of the public.

Pupil Teachers, &c.—During the year three Pupil-Teachers completed their course of training; their conduct and diligence while in the establishment was most gratifying, giving ample promise of their becoming intelligent and efficient teachers. Two succeeded, on leaving, in obtaining employment—one in Aglish National School, County Waterford, and the other in Lismacaffery National School, County Westmeath; while the third, on application, was admitted as Free Pupil in Albert Agricultural Training Institution, Glasnevin. For the vacancies caused by the removal of these, nine candidates presented themselves; and after a careful examination we selected three whom we considered to possess the greatest amount of intelligence as well as aptitude for teaching. Two of those selected were educated in the establishment.

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Bailieborough.

We have also to report most favourably of the industry and general good conduct of the Paid Monitresses. During the year five left the establishment, four of whom were appointed as Teachers of National Schools. For the list of Pupil Teachers, Paid Monitresses, &c., in the establishment during the year, see the Tables 1 and 2, Appendix B.

Annual Examination.—For the purpose of satisfying ourselves as to the actual condition of the School, the progress of the children during the past year, and also with the view of ascertaining those entitled to the premiums awarded by the Commissioners, we devoted eight days to a minute and careful examination of all the classes in both Schools.

The pupils on the rolls at the time of the examination were classed as follows:—

	Boys.	Girls.
First Book of Lessons,	26	16
Second do.	15	19
Sequel No. 1 to do.	6	7
Sequel No. 2 to do.	5	8
Third Book of Lessons,	11	13
Fourth Book of Lessons,	15	11
Selections from the British Poets,	15	11
Elements of Grammar,	52	50
Parsing and Syntax,	26	24
Descriptive Geography,	78	74
Mathematical Geography,	26	24
Arithmetical Tables,	78	74
Simple Rules of Arithmetic,	41	50
Compound Rules and Reduction,	11	13
Proportion and above,	26	11
Mental Arithmetic,	78	74
Geometry,	26	–
Algebra,	26	–
Mensuration,	26	–
Book-keeping,	26	–
Lessons on Reasoning,	15	–
Sacred Poetry,	52	50
Outlines of Natural History,	78	74
Writing on Slates,	17	16
Writing on Paper,	61	58
Writing from Dictation,	37	39
Vocal Music,	78	74
Drawing,	37	39
BRANCHES FOR FEMALES.		
Sewing,	–	74
Knitting,	–	74
Fancy Work,	–	20

The following table exhibits the ages of the children on the rolls at the period of the examination:—

Ages.	Boys.	Girls.	Ages.	Boys.	Girls.
5 years	4	2	15 years	5	5
6 ,,	4	4	16 ,,	2	5
7 ,,	4	5	17 ,,	2	–
8 ,,	5	3	18 ,,	1	–
9 ,,	8	7	19 ,,	–	3
10 ,,	7	3	20 ,,	–	–
11 ,,	13	11	21 ,,	1	–
12 ,,	12	11			
13 ,,	3	8	Totals,	78	74
14 ,,	7	7			

Average age of Boys, 11 years.
Average age of Girls, 11·5 years.

The result of the examination was highly satisfactory; in every class the progress of the pupils was most apparent, and such as to lead to the conclusion that the Teachers had faithfully discharged their respective duties towards them.

Premiums.—The following table will show the manner in which the sum awarded by the Commissioners was distributed:—

BOYS' SCHOOL.

First, or lowest Class—One Premium of 2*s.* 6*d.*; two of 2*s.*
Second Class—One Premium of 4*s.*; one of 3*s.* 6*d.*; two of 3*s.*
Sequel Class—One Premium of 5*s.*; one of 4*s.*; one of 3*s.*
Third Class—One Premium of 6*s.*; one of 5*s.*; one of 4*s.*
Fourth Class—One Premium of 7*s.*; one of 6*s.*; one of 5*s.*; one of 4*s.*
Agriculture—One Premium of 5*s.* 6*d.*; one of 5*s.*; two of 4*s.*; one of 3*s.* 6*d.*; one of 3*s.*
Vocal Music—One Premium of 4*s.* 6*d.*; one of 3*s.* 6*d.*; one of 2*s.* 6*d.*
Drawing—One Premium of 7*s.*; one of 6*s.*; one of 4*s.*; one of 3*s.*

GIRLS' SCHOOL.

First Class—One Premium of 2*s.* 6*d.*; two of 2*s.*
Second Class—One Premium of 3*s.*; one of 2*s.* 6*d.*; two of 2*s.*
Sequel Class—One Premium of 4*s.*; one of 3*s.*; one of 2*s.* 6*d.*; one of 2*s.*
Third Class—One Premium of 5*s.*; one of 4*s.*; one of 3*s.*; one of 2*s.* 6*d.*
Fourth Class—One Premium of 7*s.*; one of 6*s.*; one of 5*s.*
Needlework—Two Premiums of 5*s.*; two of 4*s.*; one of 3*s.*; two of 2*s.*
Vocal Music—One Premium of 6*s.*; one of 3*s.* 6*d.*; one of 2*s.* 6*d.*
Drawing—One Premium of 7*s.*; one of 6*s.*; one of 4*s.*; one of 3*s.*

Drawing and Vocal Music.—The introduction of drawing has been attended with the most gratifying results. For the progress of the pupils in this branch, as well as in vocal music, we refer to the following Report of the Drawing Master, Mr. Sheil:—

January, 1854.

SIR,—In compliance with your instructions, I beg to lay before you the following Report on the state of the Drawing and Music Classes in Bailieborough District Model School:—

Drawing.—In the beginning of the year there was some difficulty in procuring the regular attendance of the children, owing to the severity of the winter season and the early hour of the lesson, but as the weather became milder the attendance became more regular; the average daily attendance was about 70, and the highest number on the rolls for the same period 104—namely, 15 Teachers and Monitors, 4 Agricultural Pupils, 39 boys and 46 girls. As the class had only been established in November of the preceding year, the children were engaged in the early part of this year in outlining from copies and learning the first principles of perspective. Since then, however, all have gone through a course of model drawing (Butler Williams') and drawing from the shaded flat, while the more advanced pupils have learned the principles of perspective, lineal and aerial, and the theory of colours as applied to operative painting.

Owing to the zeal and attention of the pupils some are already capable of sketching from nature, from the knowledge and freedom of hand acquired in model drawing; others have commenced water-colour painting, after going through a course of crayon and pencil drawing, while the greater number can freely and neatly copy any ordinary lithograph in pencil or chalk. Some of the Monitors have commenced architectural and mechanical drawing in Indian ink. Specimens of the drawings of the pupils in the above-mentioned styles have been framed, and are exhibited on the walls of the class-rooms. I may here mention that one of the pupils was awarded a prize of a case of mathematical instruments by the Department of Science and Art, London, for the manner in which some of his drawings were executed.

Vocal Music.—During the past year all the pupils, Pupil Teachers, and Monitors of the male and female schools received instruction in vocal music. During this time they have gone through Hullah's Manual, studying the principles contained in it, and learning its best songs. They have also been taught some of the important portion of the History of Music, and learned to sing many pieces by such composers as Wallrent, Stephenson, Rupert, Moore, &c., for one, two, three, or four voices. With regard to the proficiency of the pupils I beg leave to refer to the observations taken from the "Visitors' Book."

I am, Sir, your obedient servant,

EDWARD SHEIL,
Drawing Master.

J. Patten, Esq., M.D.,
Head Inspector.

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Bailieborough.

Teachers' Drawing Class.—To extend the services of the Drawing Master to the National Schools in the neighbourhood, we established, in the beginning of autumn, a class for Teachers, which met on Saturdays. All the Teachers in the neighbourhood, and many from a great distance, attended. The class was obliged to cease operations on the approach of winter, but it is intended to re-open it as soon as the weather will permit. During the short period the class was in existence very considerable progress was made, and several of the Teachers have, we understand, introduced the study of this branch into their schools.

Public Examination.—The public examination was held on the 14th of November. The attendance of visitors was large and influential. Amongst those present were, The Marchioness of Headfort, Lady Virginia Sandars, the Rev. F. Fitzpatrick, Rector of Larah; the Very Rev. M. McQuaid, P.P.; the Rev. P. White, P.M.; the Rev. W. Bell, P.M.; and the Rev. J. Monaghan, R.C.C. Besides these there were also present a large number of the respectable inhabitants of the town and neighbourhood, as well as many of the parents and relatives of the children. The examination occupied six hours, and embraced all the subjects taught in the school. The ready and correct answering of the pupils evinced the care bestowed on them by their teachers, and gave evident satisfaction to all present. At intervals during the day the following pieces, amongst others, were sung by the pupils with taste and feeling:—"Hard by a fountain," "What are the wild waves saying?" "See our oars," "I saw from the beach," "Harvest Song," and "The Wheel," concluding with the National Anthem.

On the day following, the Marquess and Marchioness of Headfort, in the presence of a large number of visitors, distributed the prizes to the successful candidates, accompanying each with a few appropriate remarks calculated to incite the pupils to still greater diligence. After the distribution of the prizes, his Lordship addressed the pupils, complimenting them on the great number of premiums presented, which, with the superior answering of the classes he had the pleasure of hearing examined, told, he said, an honourable tale of their industry and good conduct, as well as of the zeal and capabilities of their preceptors. He said that, not having expected such a brilliant display in the various branches of education, he felt at a loss to express his sentiments at such an unexpected pleasure. He then pointed out the many advantages they were deriving from such a valuable institution, and advised them to walk steadily in the path they were pursuing. In conclusion, he wished them many happy returns of such an interesting occasion, and hoped that after having left school, while following their various avocations, they would all enjoy those blessings which must result from such an extensive and useful education as they were then receiving.

Visitors, &c.—We append the following extracts from the "Visitors' Observation Book," the general tone of which, it will be seen, is highly favourable to the institution:—

Male Department.

10th January, 1854.

This is my first visit to the Bailieborough District Model School. I regret that I had not time to hear more than one class examined. Mr. MacDonald questioned the pupils in astronomy out of Dr. Sullivan's "Geography Generalized." Their answering exhibited the most gratifying proof of their industry and quickness, and of the superior qualifications of their able Teacher. Mr. Sheil conducts the music class very successfully; his pupils have made satisfactory progress, and deserve every encouragement. The drawing class has only recently commenced.

Maurice Cross,
Secretary to the Commissioners of National Education.

APPENDIX G.

I. Reports on District Model Schools.

Bailieborough.

January 30th, 1854.

I visited the schools this day, and I have great pleasure in bearing testimon to the orderly manner in which they have been conducted; to the intelligenc manifested by the pupils of the fourth class of boys, and their accurate knowledge of geography, as well as of the derivation of words.

I am happy, also, to record my conviction of the great progress the pupils o the music class have made.

PATRICK WHITE,
Presbyterian Minister.

May 31st, 1854.

Visited this Model School, and was present at an exercise in geography, i which great knowledge was displayed by the pupils, whilst their manner clearl proved that all their faculties were called into action.

✠ JAMES BROWNE.

July 21st, 1854.

The Lady Olivia Fitzpatrick and the Hon. Miss Vivian have heard th third and fourth classes examined, and were very much pleased.

October 7th, 1854.

Lady Young visited the school, and was much gratified, as usual.

October 7th, 1854.

Mr. Henry Cole, C.B., inspected the drawing classes. The children appeare most practised in model drawing. It would be well that the school should b supplied with some few ornamental casts, and with some mechanical drawin copies. The use of the lead pencil should be introduced.

October 19th, 1854.

I have visited the Model School, and heard the fourth class of boys examined the pupils seem to have made very good progress. I have also examined a number of drawings in the school, with which I am much pleased.

M. TAYLOR.

I visited at the same time, and was equally gratified.

JAMES TAYLOR, M.D.

November 16th, 1854.

I observed a drawing of one of the boys which gave promise of much talent a chorus of the children was admirably well sung, and in perfect time.

HEADFORT.

November 16th, 1854.

Yesterday was my first visit to a Model School, and it happened to be the da for the general inspection. I was present during the whole of the examination and I have great pleasure in stating that I was not only agreeably surprise but exceedingly pleased with the answers and ability displayed on the occasion. The way in which every thing was conducted reflects great credit on thei instructors.

FRANCES HEADFORT.

Female Department.

January 10th, 1854.

Notwithstanding the extreme severity of the weather, I found 46 girls present and 74 on the rolls. I heard a class of the juvenile children examined in geography. Their progress surprised and gratified me. The school-room is ver neat; the children were orderly, and every thing I saw and heard regarding th female department reflects great credit on Miss Cussen, the Teacher.

MAURICE CROSS,
Secretary to the Commissioners of National Educatio

April 5th, 1854.

Heard a class examined on geography. Their answering was exceeding creditable to their Teacher and themselves. The copy-books are very clea kept, and the writing good.

WM. WHITE,
Pres. Minister, Down.

APPENDIX G.

I. Reports on District Model Schools.

Bailieborough.

April 27th, 1854.

I have listened with much attention to the answering of a class under examination by Miss Cussen, and it affords me much pleasure in stating that never in my life have I heard from *any class* more correct answering, or have I seen greater evidence, under *any* circumstances, of satisfactory progress than that which the pupils of Miss Cussen evinced.

CECIL P. STONE,
Cor. Member of Montreal U. S. Society.

May 10th, 1854.

I have heard a class examined in geography by Miss Cussen, and was very much pleased and surprised at the good answering of the children.

ANNA M. BERESFORD.

May 31st, 1854.

Visited the female school; was present at the exercises in reading and geography, and was highly gratified by the perfect accuracy and graceful manner of answering of the pupils.

✠ JAMES BROWNE.

July 21st, 1854.

Lady Olivia Fitzpatrick and the Hon. Miss Vivian have just heard, with great pleasure, the singing class, and were much surprised at the great proficiency they have made in so short a time; they have likewise seen the drawings, and with equal surprise and pleasure.

August 11th, 1854.

Visited the female department of the school; heard Miss Cussen examine the first class in geography; the answering was remarkably good, reflecting the greatest credit on the Teacher.

JOHN O'REILLY,
R. Academy.

September 20th, 1854.

Lady Young visited the schools and was delighted at the improvement, since she last visited them, in singing and drawing.

I visited the female department of the Model School and feel great pleasure in being able to state that the system of education and the acquirements of the children, according to their different ages, surpass any thing I have yet witnessed under the National Board.

J. MONAGHAN, R.C.C.

October 6th, 1854.

Lady Young visited the schools and examined the girls' first and fourth classes; they answered remarkably well.

November 15th, 1854.

I have been highly gratified by the answers of the children this day. Many of them displayed a degree of intelligence beyond their years, and all seemed to have profited by the instructions of their Masters and Mistresses. I observed, also, a great degree of emulation amongst them.

HEADFORT.

December 12th, 1854.

We have this day viewed specimens of the drawing in the Model School of Bailieborough, and we think they exhibit considerable talent and progress, and do great credit to their instructor.

FREDERICK FITZPATRICK, Rector.

I fully concur in the opinion expressed by the Rev. F. Fitzpatrick relative to the specimens of drawing in the school-room; and in addition, may add, I have great pleasure in bearing testimony to the efficiency of the pupils in acquiring a knowledge of both the theory and practice of music, as well as of literature, agriculture, and science, exhibited on the day of our annual examinations.

PATRICK WHITE,
Presbyterian Minister, 1st Bailieborough.

Conclusion.—The respectable position which this School has attained, and its success as a training establishment, as is manifested by the desire of Managers to secure the services of its pupils as Teachers, realize, we should hope, the wise views of the Commissioners in its establishment; whilst the harmony and good feeling with which persons of all creeds co-operate in promoting the welfare of the school prove satisfactorily the practicability of a mixed system of education. We cannot conclude this Report without expressing our thanks for the cordial support which we have at all times received from the clergy of the different denominations in the town and neighbourhood, which, beyond doubt, has very materially contributed to the success of this Institution.

We are, Gentlemen, your obedient servants,

JAMES PATTEN,
Head Inspector.
THOMAS MCILROY,
District Inspector.

The Secretaries,
Education Office, Dublin.

APPENDIX A.—TABLE 1.

RETURN of ATTENDANCE, SCHOOL FEES, &c., for the Year ended December, 1854.

—	BOYS.					GIRLS.					TOTALS.			
	Average number on Rolls.	Average daily attendance.	Proportion of daily attendance to 100 on Rolls.	Amount of School Fees received.	Amount of School Requisites purchased.	Average number on Rolls.	Average daily attendance.	Proportion of daily attendance to 100 on Rolls.	Amount of School Fees received.	Amount of School Requisites purchased.	Average number on Rolls.	Average daily attendance.	Amount of School Fees received.	Amount of School Requisites purchased.
				£ s. d.	£ s. d.				£ s. d.	£ s. d.			£ s. d.	£ s. d.
January,	91·7	63·3	69·1	2 6 10	0 17 1	72·5	43·3	59·7	2 12 0	0 12 1½	164·2	106·6	4 18 10	1 9 2½
February,	99·2	71·0	71·6	3 15 10	0 14 10½	72·0	54·1	75·1	1 14 0	0 8 11	171·2	125·1	5 9 10	1 3 9½
March,	96·7	70·3	72·8	2 12 3	0 9 1	72·2	55·0	76·0	2 0 2	0 7 1½	168·9	125·3	4 12 5	0 16 2½
April,	86·9	57·3	66·0	1 19 5	0 11 6½	72·3	51·0	70·5	2 1 6	0 12 9	159·2	108·3	4 0 11	1 4 3½
May,	82·8	63·5	76·8	4 18 2	1 1 5	80·0	66·0	82·5	3 2 4	0 17 7½	162·8	129·5	8 0 6	1 17 0½
June,	84·2	69·5	82·6	3 6 2	0 10 8½	87·1	72·0	83·0	2 18 8	1 1 1½	171·3	141·5	6 4 10	1 11 10
July,	85·5	66·7	78·0	1 17 7	0 6 2	89·0	66·0	74·1	1 4 9	0 6 1	174·5	132·7	3 2 4	0 12 3
August,	84·8	59·2	70·0	1 2 6	0 4 11	91·5	70·6	77·1	2 15 6	0 2 10½	176·3	129·8	3 18 0	0 7 9½
September,	73·7	47·0	64·0	2 11 11	0 10 4	80·0	56·0	70·2	1 18 7	0 6 11	153·7	103·0	4 10 6	0 17 3
October,	70·7	55·0	78·0	2 13 2	0 18 4	74·8	59·4	79·4	2 5 2	0 7 4½	145·5	114·4	4 18 4	1 0 8½
November,	78·5	70·4	90·0	2 14 9	0 7 4	75·4	60·3	80·0	2 0 8	0 7 8½	153·9	130·7	4 15 5	0 15 0½
December,	82·0	65·0	79·0	1 19 9	0 18 7	69·2	48·0	69·3	0 15 2	0 6 11	151·2	113·0	2 14 11	1 5 6
Totals, and General Average,	84·7	63·2	74·8	31 18 4	7 5 4½	78·0	58·4	74·7	25 8 6	5 17 6½	162·7	121·6	57 6 10	13 2 11

APPENDIX G.

I. Reports on District Model Schools.

Bailieborough.

APPENDIX G.

I. Reports on District Model Schools.

Bailieborough.

APPENDIX A.—TABLE 2.

OCCUPATION OF PARENTS.	BOYS.			GIRLS.			TOTALS.		
	5*s.* per Quarter.	2*s.* 6*d.* per Quarter.	1*s.* 1*d.* per Quarter.	5*s.* per Quarter.	2*s.* 6*d.* per Quarter.	1*s.* 1*d.* per Quarter.	5*s.* per Quarter.	2*s.* 6*d.* per Quarter.	1*s.* 1*d.* per Quarter.
Baker, . . .	–	1	–	–	–	–	–	1	–
Butcher, . .	–	–	3	–	–	2	–	–	5
Builder, . .	–	2	–	–	–	–	–	2	–
Blacksmith, . .	–	1	–	–	2	–	–	3	–
Carpenter, . .	–	2	–	–	1	–	–	3	–
Constabulary, .	–	1	2	–	1	3	–	2	5
Cooper, . .	–	–	–	–	–	1	–	–	1
Dealer in Fowl, .	–	–	1	–	–	–	–	–	1
Doctor, . .	–	–	1	–	–	1	–	–	2
Farmer, . .	4	6	6	3	7	6	7	13	12
Hotel-keeper, .	–	1	–	–	1	–	–	2	–
House-painter, .	–	–	–	–	–	2	–	–	2
Labourer, . .	–	–	19	–	–	13	–	–	32
Nailer, . .	–	1	1	–	–	1	–	1	2
Pensioner, . .	–	–	–	–	1	–	–	1	–
Publican, . .	–	3	2	1	1	3	1	4	5
Presbyterian Minister,	1	–	–	1	–	–	2	–	–
Private, . .	–	2	–	–	–	–	–	2	–
Sawyer, . .	–	–	–	–	–	1	–	–	1
Shopkeeper, . .	3	3	–	3	4	1	6	7	1
Shoemaker, . .	–	–	–	–	–	1	–	–	1
Servant, . .	–	–	1	–	–	–	–	–	1
Stone-mason, .	–	–	1	–	–	–	–	–	1
Tailor, . .	–	–	1	–	–	1	–	–	2
Teacher, . .	–	–	1	–	1	–	–	1	1
Watchmaker, .	–	–	2	–	–	–	–	–	2
Woollen-draper, .	6	–	–	5	–	–	11	–	–
Total, .	14	23	41	13	19	36	27	42	77

APPENDIX G.

I. Reports on District Model Schools.

Bailieborough.

APPENDIX B.—TABLE 1.

RETURN of PUPIL-TEACHERS and AGRICULTURAL PUPIL-BOARDERS in BAILIEBOROUGH DISTRICT MODEL SCHOOL, during the Year 1854.

Pupil-Teachers.

Name.	Age.	Religion.	Occupation of Parents.	Where Educated.	When appointed.	Date of leaving.	Months spent in the Establishment	Cause of Removal, Destination, &c.	General Health.
1. Hamilton Bell, .	19	R. C.	Servant, . .	Bailieboro' D. M. S.	Sept. 16, 1853,	June 9, 1854,	21	Appointed Teacher of Aglish N. S., Waterford, . . .	Good.
2. Matthew O'Brien,	20	R. C.	Mechanic, . .	Virginia N. S. .	June 9, 1853,	Ditto, .	12	Pupil Glasnevin Agrl. School,	Do.
3. William Skelly, .	20	R. C.	Farmer, . .	Ditto, . .	June 14, 1853,	Ditto, .	12	Teacher Lismacaffry N. S., Co. Westmeath, ...	Do.
4. William Clarke, .	19	R. C.	Ditto, . .	Ditto, . .	July 17, 1854,	—	6	Still in the Establishment, .	Do.
5. Henry Magorry, .	18	R. C.	Ditto, . .	Bailieboro' D. M. S.	Ditto, .	—	6	Ditto, . . .	Do.
6. James M'Cartney,	17	E. C.	Trader in Clocks,	America & England.	Ditto, .	—	6	Ditto, . . .	Do.

Agricultural Pupil-Boarders.

Name.	Age.	Religion.	Occupation of Parents.	Where Educated.	When appointed.	Date of leaving.	Months spent in the Establishment	Cause of Removal, Destination, &c.	General Health.
7. James Kiernan, .	16	R. C.	Farmer, . .	Carrigallen N. S., Leitrim, . .	Nov. 24, 1853,	Nov. 24, 1854,	12	Summoned to Glasnevin, .	Good.
8. John Leddy, .	16	R. C.	,, . .	Tricarvagh N. S. .	Jan. 3, 1854,	—	11	Still in the Establishment, .	Tolerable.
9. Wm. Woodhouse,	16	E. C.	Die Engraver, .	Erasmus Smith's School, Dublin, .	Jan. 23, 1854,	—	11	Ditto, . . .	Good.
10. Alex. Lang, .	16	Pres.	Inspector of Letter Carriers, Dublin,	Various private Schools, Dublin,	June 1, 1854,	—	7	Ditto, . . .	Do.
11. John M'Manus, .	16	R. C.	Farmer, . .	Arvagh, Co. Cavan,	Dec. 15, 1854,	—	—	Ditto, . . .	Do.

APPENDIX G.

I. Reports on District Model Schools.

Bailieborough.

APPENDIX B.—TABLE 2.

RETURN of PAID MONITRESSES in BAILIEBOROUGH DISTRICT MODEL SCHOOL during the Year 1854.

No. and Name.	Age at Entrance.	Religious Denomination.	Occupation of Parents.	Where Educated.	When appointed.	Date of leaving.	Months spent in the Establishment.	Cause of Removal and Destination.	Health.
1. Anne J. Stewart, .	13	Pres.	Head Con. Police,	Bailieboro' D. M. S.	May 11, 1852,	—	32	Still in the Establishment, .	Good.
2. Mary Finnegan, .	17	R. C.	Farmer, . .	Ditto, .	June 1, 1853,	July 1, 1854,	13	Teacher Mullagh School, .	Do.
3. Henrietta Maxwell,	15	E. C.	Builder, . .	Ditto, .	Ditto, .	—	19	Still in the Establishment, .	Do.
4. Anne Smith, .	13	R. C.	Farmer, . .	Ditto, .	Dec. 1, 1853,	—	13	Ditto, . . .	Do.
5. Margaret Brady, .	16	R. C.	National Teacher,	Ditto, .	April 1, 1854,	Aug. 5, 1854,	4	Required at home, . . .	Do.
6. Maria M'Culloh, .	16	Pres.	Farmer, . .	Ditto, .	July 1, 1854,	July 8, 1854,	—	Appointed to Killygorman N. S.	Do.
7. Margaret King, .	15	R. C.	Ditto . .	Ditto, .	Nov. 1, 1851,	Mar. 31, 1854,	29	Appointed to Shercock N. S. .	Do.
8. Maria Wilson, .	14	E. C.	Teacher, . .	Ditto, .	July 1, 1851,	June 30, 1854,	36	Appointed to Gosford-place N. S., County Armagh, . .	Do.
9. Bridget M'Evoy, .	17	R. C.	Farmer, . .	Ditto, .	July 1, 1854,	—	6	Still in the Establishment, .	Do.

APPENDIX B.—TABLE 3.

LIST of AGRICULTURAL PUPIL-BOARDERS who have entered BAILIEBOROUGH DISTRICT MODEL SCHOOL, from opening to the 31st December, 1854.

Name.	Age.	Religion	Former employment.	Where educated.	When appointed.	Date of leaving.	Destination.
Patrick Clarke,	16	R. C.	Paid Monitor Geevagh N. S.,	Geevagh N. S.,	June 24, 1850,	May 31, 1851,	Summoned to Glasnevin Model Farm.
Joseph Burns,	17	Pres.	Pupil Dromecara N. S.,	Dromecara N. S.,	July 3, 1850,	July 3, 1851,	Ditto.
Samuel Gibson,	16	Pres.	Farming,	Lear Hibernian Society's School,	Ditto,	Sept. 9, 1850,	Employed at his father's farm.
Samuel Parker,	21	Pres.	Pupil-Teacher,	Dromecara N. S.,	Mar. 1, 1851,	Sept. 1, 1851,	Summoned to Glasnevin Model Farm.
Jas. John M‘Ness,	18	R. C.	Pupil,	Eton College, Galway,	Ditto,	Nov. 16, 1851,	Home.
Robert Burns,	18	Pres.	Ditto,	Finternaght N. S.,	July 22, 1851,	July 3, 1852,	Glasnevin Model Farm.
James Wiggins,	17	Pres.	Ditto,	Ardmoan N.S., and Bailieborough D. M. S.	August, 1851,	July 28, 1852,	Ditto.
Henry Clarke,	18	E. C.	Ditto,	Private School, and Bailieborough D. M. S.,	Jan. 26, 1852,	Jan. 8, 1853,	Ditto.
James Crossan,	17	R. C.	Ditto,	Ditto,	Ditto,	Ditto,	Ditto.
Thomas M‘Cabe,	18	R. C.	Ditto,	Duriham N. S., and Bailieborough D. M. S.,	Aug. 16, 1852,	Aug. 16, 1853,	Ditto.
Hamilton Bell,	17	R. C.	Ditto,	Bailieborough D. M. S.,	Sept. 1, 1852,	May 16, 1853,	Pupil-Teacher Bailieborough District M. S.
Abraham Hogg,	16	Pres.	Farming,	Bellis Hibernian Society's School,	April 1, 1853,	Sept. 30, 1853,	Entered Classical School.
Charles Reilly,	18	R. C.	Ditto,	Duriham N. S.,	April 11, 1853,	July 11, 1853,	Teaching.
Lynegar Brock,	20	R. C.	Ditto,	Latchey N. S.,	Sept. 19, 1853,	Dec. 25, 1853,	Resigned.
James Kiernan,	16	R. C.	Pupil,	Carrigallen N. S.,	Nov. 24, 1853,	Nov. 14, 1854,	Summoned to Glasnevin Model Farm.
John Leddy,	16	R. C.	Ditto,	Tricarvagh N. S.,	Jan. 3, 1854,	Jan. 3, 1855,	Left at expiration of year of training.
Wm. Woodhouse,	16	E. C.	Ditto,	Erasmus Smith's School, Dublin,	Jan. 23, 1854,	—	Still in Establishment.
Alexander Lang,	16	Pres.	Ditto,	Private Schools, Dublin,	June 1, 1854,	—	Ditto.
John M‘Manus,	16	R. C.	Ditto,	Arvagh N. S., Co. Cavan,	Dec. 15, 1854,	—	Ditto.

Appendix G.

I. Reports on District Model Schools.

Bailieborough.

Appendix C.—Table 1.

List of Pupils in Bailieborough District Model School, Male Department, who have become Teachers, Pupil-Teachers, Agricultural Pupils, or Paid Monitors, from the opening to the 31st December, 1854.

Name.	Age.	Religious Denomination.	Date of leaving.	Destination.
Samuel Parker,	19	Presbyterian,	June, 1850,	Appointed Pupil-Teacher.
Joseph Burns,	16	Ditto,	July, 1850,	Agricultural Pupil-Boarder, Bailieborough District Model School.
John Wauhope,	18	Ditto,	October, 1850,	Agricultural Pupil-Boarder, Kilwaughter National School, County Antrim.
Samuel Bell,	19	Roman Catholic,	February, 1851,	Free Agricultural Pupil-Boarder, Farrahy Model Agricul. N. S., County Cork.
Thomas Hall,	16	Presbyterian,	June, 1851,	Appointed Pupil-Teacher.
Thomas Boyle,	18	Roman Catholic,	Ditto,	Ditto.
Robert Burns,	18	Presbyterian,	July, 1851,	Agricultural Pupil-Boarder, Bailieborough District Model School.
James Wiggins,	17	Ditto,	August, 1851,	Free Agricultural Pupil-Boarder, Bailieborough District Model School.
John Sullivan,	15	Roman Catholic,	February, 1851,	Substitute Teacher in a National School.
James Crossan,	17	Ditto,	January, 1852,	Agricultural Pupil-Boarder, Bailieborough District Model School.
William Clisdell,	18	Presbyterian,	February, 1852,	Substitute Teacher in a National School.
Richard Heaslip,	17	Established Church,	June, 1852,	Appointed Pupil-Teacher.
Thomas M'Cabe,	18	Roman Catholic,	August, 1852,	Agricultural Pupil-Boarder, Bailieborough District Model School.
Hamilton Bell,	16	Ditto,	September, 1852,	Free Agricultural Pupil-Boarder, Bailieborough District Model School.
Charles Reilly,	18	Ditto,	Ditto,	Agricultural Pupil-Boarder, Bailieborough District Model School.
John R. Stewart,	14	Presbyterian,	May, 1853,	Appointed Paid Monitor, Bailieborough District Model School.
Michael Murphy,	12	Roman Catholic,	Ditto,	Ditto.
Lynegar Brock,	20	Established Church,	September, 1853,	Appointed Agricultural Pupil-Boarder, Bailieborough District Model School.
James M'Cartney,	17	Ditto,	July, 1854,	Appointed Pupil-Teacher.
Henry Magorry,	18	Roman Catholic,	Ditto,	Ditto.
John M'Manus,	16	Ditto,	December, 1854,	Agricultural Pupil-Boarder, Bailieborough District Model School.

APPENDIX G.

I. Reports on District Model Schools.

Bailieborough.

APPENDIX C.—TABLE 2.

LIST of PUPILS in BAILIEBOROUGH DISTRICT MODEL SCHOOL, FEMALE DEPARTMENT, who have become TEACHERS, or PAID MONITRESSES, from the opening to the 31st December, 1854.

Name.	Age.	Religious Denomination.	When struck off Roll.	Destination.
Mary Quoile,	18	Roman Catholic,	July 1, 1851,	Teacher of a National School.
Mary Reilly,	15	Ditto,	April 2, 1852,	Ditto.
Anne King,	16	Established Church,	May 1, 1852,	Teacher of an Industrial School.
Eliza Mahaffey,	14	Presbyterian,	August 31, 1852,	Teacher of a National School.
Maria Wilson,	14	Established Church,	June 1, 1851,	Paid Monitress, Bailieborough District Model School.
Margaret King,	15	Roman Catholic,	November 1, 1851,	Ditto.
Margaret Sweeney,	15	Ditto,	May 1, 1852,	Ditto.
Anne J. Stewart,	13	Presbyterian,	Ditto,	Ditto.
Mary Tighe,	16	Roman Catholic,	June 1, 1852,	Teacher of a National School.
Susan Gallagan,	16	Ditto,	December 1, 1852,	Paid Monitress in a National School.
Mary Finnegan,	16	Ditto,	February 1, 1853,	Substitute Teacher in a National School.
Henrietta Maxwell,	15	Established Church,	June 1, 1853,	Paid Monitress, Bailieborough District Model School.
Anne Smith,	13	Roman Catholic,	December 3, 1853,	Ditto.
Mary Brady,	15	Ditto,	April 1, 1854,	Required at home.
Bridget M'Evoy,	16	Ditto,	July 6, 1854,	Paid Monitress, Bailieborough District Model School.
Maria M'Culloh,	15	Presbyterian,	Ditto,	Teacher of a National School.
Catherine Smyth,	17	Roman Catholic,	Sept 6, 1853,	Ditto.
Jane Trotter,	20	Established Church,	Ditto,	Ditto.

APPENDIX G.

I. Reports on District Model Schools.

Bailieborough.

APPENDIX D—1.

PROGRAMME of STUDIES Prepared for EXAMINATION IN MALE DEPARTMENT, November, 1854.

First Class.—Lesson Book : Senior Division—As far as page 30. Spelling-Book Superseded : Junior Division—Four columns of Verbal Distinctions. Senior Division : from the beginning to the end of page 29. English Grammar : a portion of Orthography in "Sullivan's English Grammar ; to distinguish the Articles, Nouns, Verbs, and Adjectives in First Book of Lessons. Geography : the Preliminary Definitions in "Sullivan's Introduction to Geography ;" to name and point out on the Map of Europe the principal countries and their chief towns. Arithmetic : Senior Division—Notation and numeration to thousands ; some of the multiplication and pence tables. Natural History : to tell the division, class, and order of each animal mentioned in the lesson. Sacred Poetry : to repeat any of the first five pieces.

Second Class.—Lesson Book—As far as page 91. Spelling-Book Superseded : first and second classes of Verbal Distinctions, and three rules for spelling. English Grammar : Orthography in "Sullivan's English Grammar," and to point out the principal Parts of Speech in reading lessons. Geography : all the Preliminary Definitions in "Sullivan's Introduction to Geography," the outline of the Map of the World, and to have a correct knowledge of the Map of Europe. Arithmetic : to be able to write numbers to six places, to work easy exercises in Addition, Subtraction, and Multiplication, to know the Multiplication and Pence Tables, and the Tables of Weights and Measures. Natural History : to know the division, class, and order of the animals mentioned in the lesson book. Sacred Poetry : to repeat eight selections.

Sequel Class.—Lesson Book : Sequel No. 1 as far as page 83, Sequel No. 2 as far as page 41. Spelling-Book Superseded : to know the First and Second Classes of Verbal Distinctions, and all the Rules for Spelling. English Grammar : to know the text of "Sullivan's English Grammar" as far as the Verb, and to parse a sentence etymologically. Geography : to have a fair knowledge of the Map of the World, and some acquaintance with the Maps of England and Ireland. Arithmetic : to be able to work exercises in the simple and compound rules, and Reduction of Money. Natural History : to be acquainted with the outline given in Sequel No. 2. Sacred Poetry : to repeat eight selections.

Third Class.—Lesson Book : as far as page 140. English Grammar : "Sullivan's English Grammar" as far as Syntax, and to parse a simple sentence. Spelling-Book Superseded : all the Verbal Distinctions, Rules for Spelling, Prefixes and Affixes, and the Latin Roots. Geography : three first chapters in "Geography Generalized," and the Maps of Scotland, Africa, Asia, and America. Arithmetic : to be able to work sums as far as Proportion. Book-keeping : Board's Treatise, two first sets. Mensuration : Board's Treatise, first four problems in Superficies. Algebra : Definitions, easy exercises in Addition, and a few Simple Equations. Geometry : Definitions, and a few propositions in first book. Natural History : same as junior classes. Money Matters : the lessons on Money, Exchange, Commerce, and Coin.

Fourth Class.—Lesson Book : the whole of the Fourth Book. Spelling-Book Superseded : the whole of the book to the end of English Etymologies. English Grammar : the whole of "Sullivan's English Grammar," and to parse any sentence selected from the Lesson Book. Arithmetic : the Rules of Commercial Arithmetic, Vulgar and Decimal

Fractions, Involution and Evolution. Geography: the whole of the "Geography Generalized," including the Chapter on Astronomy, Blank Maps, &c. Book-keeping: the first six sets in Board's Treatise. Mensuration: Board's Treatise, the first twenty-eight problems in Section II., and the whole of Section VII. Algebra: to Quadratic Equations. Political Economy: "Easy Lessons on Money Matters." Reasoning: the first twelve lessons in "Easy Lessons on Reasoning." Natural Philosophy: the Natural Philosophy given in Fifth Book of Lessons.

Writing.—All write on paper except First Class; the Sequel, Third and Fourth Classes write from dictation.

Mental Arithmetic.—All are exercised in this occasionally.

ALEXANDER MACDONALD.
Literary Teacher.

APPENDIX D—2.

PROGRAMME of STUDIES of AGRICULTURAL CLASS.

Farms and Offices.—Choice of farms—division of farms, and formation of fields—situation of houses and offices—the different rotations—soils to which they are best suited. Drainage.—Evil effects of an excess of moisture in the soil with reference to the growth of crops on it—manure applied to it—labour and climate—various systems of draining, and materials used, &c.

Trenching and Subsoiling.—The value of these operations in increasing the productive powers of soils—when they should be executed, and the various means employed in their performance.

Cultivation.—The different varieties of wheat, oats, barley, and rye, and the several green and green-fallow crops—season for, and various methods of sowing and planting—quantities of seeds and manures—after-culture, harvesting, &c.

Soils.—Whence derived—several kinds occurring in Ireland—character and physical properties—organic and inorganic constituents.

Manures.—Composition of the solid and liquid excrement of the various domesticated animals—general character of the farm-yard and liquid manures—collection and preservation—character and application of portable manures, such as guano and bones, mineral and vegetable manures.

Chemistry.—Atmospheric air—importance to animal and vegetable life—properties of its several gases; water—its use and properties; constituents of plants, organic and inorganic.

JOHN STEWART, Agriculturist.

November, 1854.

APPENDIX D—3.

PROGRAMME of STUDIES Prepared for EXAMINATION in FEMALE DEPARTMENT, November, 1854.

First Class.—Lesson Book: reading, spelling, and explanation to page 29. Grammar: to be able to point out the Nouns, Adjectives, and Verbs as they occur in the reading lessons. Geography: to be acquainted with the outlines of the world. Tables: to know the Multiplication Table to "five times." Sacred Poetry: to be able to repeat six selections.

Second Class.—Lesson Book: spelling, reading, and explanation, to the 130th page. Spelling-Book Superseded: to know Class First of Verbal Distinctions, and the First Rule for Spelling. Grammar: to be able to distinguish the Parts of Speech as they occur in the reading lessons. Arithmetic: to be able to work sums readily in Addition and Subtraction. Tables: to be familiar with the Multiplication and Pence Tables. Geography: to be acquainted with the Map of the World.

Sequel Class.—Lesson Book: reading, spelling, and explanation, to page 179 of Sequel No. 2. Spelling-Book Superseded: to be acquainted with Class First of Verbal Distinctions, and to know four Rules for Spelling. Grammar: to be familiar with the text of "Sullivan's Grammar" as far as the Relative Pronoun, and to be able to parse a simple sentence from the Lesson Book. Geography: to be acquainted with the "Introduction to Geography" as far as page 25, and the Maps of Europe and Ireland. Natural History: to be familiar with the lessons on Natural History contained in Sequel No. 2. Arithmetic: to be able to work accurately and readily sums in the simple rules and Compound Addition. Tables: to know the Multiplication Table and the Tables of Weights and Measures. Writing from Dictation: to write any sentence selected from Lesson Book.

Third Class.—Lesson Book: reading, spelling, and explanation of Third Book to the 176th page, with the Roots, Prefixes, and Affixes, as they occur. Spelling-Book Superseded: to be acquainted with the First and Second Classes of the Verbal Distinctions, and the Rules for Spelling. Grammar: to be familiar with the text of "Sullivan's Grammar" as far as page 61, and to be able to parse any sentence selected from the Third Lesson Book. Geography: to be acquainted with the first three chapters of the "Geography Generalized," and the Maps of Europe, Ireland, and South America. Writing from Dictation: to be able to write sentences selected from Spelling-Book Superseded, or Third Lesson Book. Natural History: the divisions, classes, and orders of vertebrate Animals, from "Patterson's Introduction to Zoology." Arithmetic: to be able to work exercises in the Compound Rules and Reduction.

Fourth Class.—Lesson Book: the whole of the Fourth Book and seven lessons from Fifth Book; Prefixes, Affixes, Derivations and English Etymologies of words in the lesson; Easy Lessons on Money Matters; Selections from British Poets. Spelling-Book Superseded: Verbal Distinctions, Rules for Spelling, and English Etymologies. Grammar: to parse and transpose any piece of poetry from Fourth Lesson Book, to be familiar with the figures of Rhetoric and the different kinds of verse, and to know the text of "Sullivan's Grammar" as far as page 70. Geography: the first five chapters of "Geography Generalized," and the Maps of Europe, Asia, and Ireland. Arithmetic: to be able to work sums as far as Simple Interest. History: to be familiar with the outlines of English and Roman History, and with the Historical Sketches of Great Britain and Ireland given in "Sullivan's Introduction to Geography." Natural History: to be acquainted with "Patterson's Introduction to Zoology," Part I. Writing: all except First Class write on paper.

MARY ANNE CUSSEN,
Head-Teacher.

APPENDIX G.

I. Reports on District Model Schools.

Newry.

No. 2.—JOINT REPORT on the NEWRY DISTRICT MODEL SCHOOL and the PUBLIC EXAMINATION of the PUPILS HELD THEREIN, by JAMES PATTEN, Esq., M.D., M.R.I.A., Head Inspector, and A. J. SIMPSON, Esq., District Inspector.

May, 1855.

GENTLEMEN,—We have the honour of transmitting to you, for the information of the Commissioners, our Joint Annual Report for the year 1854.

House and Premises.—The house and premises have undergone considerable repairs, painting, &c., and are now in good order; but as we have already reported, great inconvenience still arises from the want of *additional* class-rooms, one for boys and one for girls. At present the Pupil-Teachers' dining room is used as a laboratory, and stocked with chemical and scientific apparatus, diagrams, &c., and geological specimens; the Pupil-Teachers are debarred, therefore, and are obliged to convert their study room into a dining-hall. At very inconsiderable expense, and without trespassing much on the play grounds, or disfiguring in any way the architectural beauty of the building, the desired class-rooms could be easily erected.

Time Table.—The general arrangements of the School, as regards hours for secular, and for religious instruction, remain unaltered; also the sub-division of the School time, occupation of Pupil-Teachers, &c., remain the same as set forth in last Report. We earnestly hope that the Commissioners will appoint Assistant Teachers to the Newry District Model Schools, as they have already done in the case of some of the other Model Schools.

Introduction of Physical Science.—One new feature in the institution since the date of our last Report, is the introduction of Physical Science as a portion of the ordinary instruction afforded to the advanced classes of boys; and with reference to this subject, we can bear full testimony to the extraordinary success of Dr. Clarke, the lecturer appointed by the Commissioners to give instruction on this important branch. For a more detailed account of the proficiency attained by the pupils, and the subjects on which they were examined, see our observations under the head of Public Examinations. We will merely add here, that the interest excited during Dr. Clarke's stay at Newry, has by no means subsided, either among teachers or pupils; the Science Class now numbers fifty-four.

Attendance.—The annexed Table will show the numbers on the Rolls of the different departments on the 31st December, 1853, and on the 31st of December, 1854; exhibiting a decrease in the average for the latter year of eleven boys, three girls, and twelve infants. In the Boys' School we can readily account for this slight falling off, by the fact, that several of our hitherto constant pupils have now withdrawn to learn classics; and in the Infant School, the prevalence of scarlatina in summer, and the extreme severity of the winter, afford sufficient cause for the diminution with regard to it.

[NUMBER OF PUPILS.

APPENDIX G.

I. Reports on District Model Schools.

Newry.

NUMBER of PUPILS attending the INSTITUTION on 31st December, 1854.

School.	On Roll on 31st December, 1853.	Admitted in 1854.	Struck off in 1854.	On Roll on 31st December, 1854.	Daily average attendance in 1854.	Of 100 Pupils on the Roll there were in average daily attendance.
Boys', ...	121	96	117	100	73	79·
Girls', ...	108	90	100	98	78	83·
Infants', ...	89	47	69	67	39	53·
Total, . .	318	233	286	265	190	—

Finance.—In the amount of School receipts there has been a slight decrease during the past year, amounting to three pounds fourteen shillings. This may be accounted for by the fact, that three new private Schools were established in Newry during the year. The subjoined Table will give full information on this head.

RATES of PAYMENT, and the Proportions paying each Rate.

School.	1*d.* per week.	2*s.* 6*d.* per Quarter.	5*s.* per Quarter.	Total.	Actual amount of Fees received in 1854. £	*s.*	*d.*	School Expenses in 1854. £	*s.*	*d.*
Boys' School, ...	37	50	13	100	41	0	4	33	17	9
Girls' School, ...	59	31	8	98	31	17	0			
Infants' School, . .	55	12	-	67	13	9	4			
Total, ...	151	93	21	265	86	6	8	33	17	9

School requisites sold, will be seen by the following Table :—

AMOUNT of SCHOOL REQUISITES sold in 1854.

Months.	Boys. £	*s.*	*d.*	Girls. £	*s.*	*d.*	Infants. £	*s.*	*d.*	Total. £	*s.*	*d.*
January, . . .	1	14	10	0	7	8	0	0	4	2	2	10
February, . . .	1	3	10½	0	11	7	0	0	9½	1	16	3
March, . . .	1	1	11	0	18	0	0	2	7	2	2	6
April, . . .	0	11	7½	0	4	4	0	0	3	0	16	2½
May, ...	0	17	2	0	8	8	0	1	0½	1	6	10½
June, ...	1	6	10	0	18	4½	0	1	7½	2	6	10
July, ...	0	15	5	0	8	0	0	1	9½	1	5	2½
August, . . .	0	14	9½	0	7	1½	0	0	2½	1	2	1½
September, . . .	0	9	10	0	2	0	0	1	1	0	12	11
October, . . .	1	8	0	0	16	10	0	2	5	2	7	3
November, . . .	1	15	2½	0	5	3	0	0	8½	2	1	2
December, . . .	0	18	2	0	2	7		—		1	0	9
Total, . .	12	17	8	5	10	5	0	12	10	19	0	11

APPENDIX G.

I. Reports on District Model Schools.

Newry.

Religious Denominations.—The following Table will exhibit the religious denominations of the Pupils on the Rolls on the 31st December, 1854:—

Religious Denominations.	Boys.	Girls.	Infants.	Total.
Established Church, ...	14	17	14	45
Roman Catholics, ...	60	62	30	152
Presbyterians, General Assembly, . .	25	14	22	61
Do. Remonstrant Synod, .	1	5	1	7
Total, ...	100	98	67	265

Zeal and efficiency of the Head Teachers in each department.—We have much pleasure in recording our opinion of the zeal, energy, and efficiency of the Head Teachers in each department, the same under whom the Schools were opened in 1849, and to them is chiefly attributable the steady progress since made, and the high position which the Schools continue to enjoy.

To Mr. Brady, the Master of the boys' department in particular, much credit is due, for the manner in which he has succeeded in maintaining the Physical Science Class, without allowing any of its members to fall back in the ordinary subjects of School routine.

Pupil-Teachers and Monitresses.—The subjoined lists will afford ample information and particulars as to the appointments of Pupil-Teachers, &c.

During the year we periodically submitted them and the Paid-Monitresses to an examination; and, finally, when leaving the Institution, we examined each of them minutely, in order to determine their classification.

Progress made satisfactory.—The progress made by both Pupil-Teachers and Monitresses, has been, on the whole, satisfactory; and their general conduct unimpeachable; but we cannot refrain from again giving expression to our earnest conviction, that the presence of a well-qualified Second Master, with the Pupil-Teachers, during their hours of study, would tend materially to their further improvement.

LIST of PUPIL-TEACHERS whose Names appear in the previous Return, but whose period of training expired in 1854.

Names.	Age.	Religious Denomination.	Where Educated.	When Appointed.	Months in Training.	Destination. Appointed to
Andw. Callan,	18	R. C.	Newton N. S. .	Jan. 1853,	12	Birr N. S
Gilbert Elliot,	18	E. C.	Newry D. M. S.	July 1853,	12	Bessbrooke N. S.
James Graham,	19	R. C.	Pomeroy N. S.	Do.	6	Pomeroy N. S.
Michl. O'Meara,	19	R. C.	Warrenpoint N.S	Do.	12	O'Meath N. S.
Robert Sloane,	20	Pres.	Newry D. M. S.	Do.	12	Emdale N. S.
John Doyle, .	18	R. C.	Dunavan N. S.	Oct. 1853,	12	Clerkship.

[LIST OF PUPIL-TEACHERS.

LIST of the PUPIL-TEACHERS who have entered NEWRY MODEL SCHOOL from 1st January, 1854, till 31st December, 1854; being Appendix to Return of the previous year.

Names.	Age.	Religious Denomination.	Where Educated.	When Appointed.	Time of Leaving.
Patk. M'Grath,	21	R. C.	Castlewellan N. S. .	Jan. 1854,	Still in the Estab.
Frcs. Rafferty,	18	R. C.	N. T. Hamilton N. S.	June ,,	,,
Thos. Murray,	17	R. C.	Carrickmannon N. S.	July ,,	,,
John Hamilton,	17	Pres.	Ballydown N. S. .	Do.	,,
John Hill, .	16	E. C.	Newry D. M. N. S.	Do.	,,

The following tables give the statistics of the Schools as to promotions during the year, and the destination of the pupils whose names have been struck off.

NUMBER advanced from the different Classes during the year 1854.

BOYS' SCHOOL.

From First to Second,		24
,, Second to Sequel,		18
,, Sequel to Third,		40
,, Third to Fourth,		28
,, Fourth to Fifth,		32
Total,		142
Infants promoted to Boys' School,	7	
,, ,, to Girls',	3	
Total,	10	

GIRLS' SCHOOL.

From First to Second Class,	12
,, Second to Sequel,	14
,, Sequel to Third,	16
,, Third to Fourth,	16
,, Fourth to Fifth,	15
Total,	73

Destination.—The destination of the Pupils whose names have been struck off the Rolls during the year cannot, in every case, be accurately ascertained. The following statement, however, is a fair approximation:—

BOYS.

Emigrated,	10
Appointed Pupil-Teachers in the Model School, Newry,	1
In charge of a National School,	2
Working at their fathers' trade, or other occupation,	6
Bad health,	1
Died,	2
Apprenticed to various trades,	8
Struck off for irregular attendance,	67
Gone to learn classics,	8
Employed at Magnetic Telegraph,	2
Total,	117

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I. Reports on District Model Schools.

Newry.

GIRLS.

Appointed paid Monitresses in the Newry Model School,	4
Emigrated,	13
Apprenticed to Dressmakers,	2
Employed at home,	16
In charge of a National School,	1
Struck off for irregular attendance,	32
Died,	1
Total,	69

Preparatory Examinations of the Pupils.—On the week previous to the Public Examination, the 21st, 22nd, 23rd, and 24th August, we carefully and minutely examined each class in the different departments, and selected from each the pupils of the greatest merit, as well on account of their regular attendance at School and general good conduct as of their superior answering, to whom certificates and premiums were awarded and distributed at the termination of the Public Examination, held on the 29th and 30th—the Commissioners as usual granting £10 for that purpose.

During these preliminary examinations, we had ample opportunities of making ourselves fully acquainted with the general progress and proficiency of the pupils since the last examination; and we can affirm with the greatest confidence, that with few exceptions, and even in these the pupils have not retrograded, the results of our examination were entirely to our satisfaction.

In the course of the examination, we made out a table exhibiting the exact amount of proficiency attained in the several branches on which the pupils were examined, both in the male and female departments in proportion to the numbers learning; but owing to some mischance, the paper has been mislaid; should it, however, be found, it will be appended to the next Report.

The children on the rolls were classed as follows:—

	Boys.	Girls.	Infants.
First Book,	9	4	68
Second Book,	10	18	10
Sequel,	13	21	–
Third Book,	27	23	–
Fourth Book,	13	25	–
Fifth Book,	28	15	–
Book of Poetry,	66	15	–
Elements of Grammar,	66	67	–
Parsing and Syntax,	66	41	–
Descriptive Geography,	100	108	78
Mathematical Geography,	41	41	–
Arithmetical Tables,	100	108	78
First Four Rules,	32	44	–
Compound Rules and Reduction,	27	25	–
Proportion and above,	41	30	–
Mental Arithmetic,	66	76	–
Geometry,	41	–	–
Algebra,	41	–	–
Mensuration,	41	–	–
Book-keeping,	29	–	–
Lessons on Reasoning,	29	–	–
Natural Philosophy,	45	–	–
Scripture Lessons,	–	–	–
Sacred Poetry,	32	44	78
Writing on Slates,	15	24	16
,, on Paper,	85	84	–
,, from Dictation,	85	84	–
Singing,	60	30	78

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Newry.

BRANCHES FOR FEMALES.

	Girls.	Infants.
Sewing,	36	–
Knitting,	40	–
Straw Platting,	–	–
Fancy Work,	32	–

Public Examinations.—On the 29th and 30th August, we held the Public Examinations. The pupils were examined by the Head Teachers, Pupil-Teachers, and Monitresses; some questions being occasionally proposed by us. The visitors were also invited to put any questions they might think proper in connexion with the subject of examination, thus affording to the parents of the pupils, and to that portion of the public present, an opportunity of witnessing the ordinary teaching power as daily exercised in the establishment.

Number of Pupils Examined.—There were present on both days 74 boys, 78 girls, and 38 infants—total, 190.

Programme.—In addition to the course on Physical Science, the programme of examination was as extensive as that of the previous year.

In the Boys' School, at least twenty questions, and in the Girls' fifteen, on the average, were proposed on the following branches, to which answers were given, and the reasons, &c., explained.

Scripture History, Natural History, Geography, Political Economy, Mental Arithmetic, Reasoning, Geometry, and Algebra. In the Girls' School, (Junior Classes,) Scripture History, Mental Arithmetic, Reading, Rules for Spelling, Outlines of the Map of the World. Senior Classes—The general History of Europe, Geography, descriptive and generalized, Mental Arithmetic, (entire course,) Roots and Derivations of Words, Prefixes and Affixes, &c.

Physical Science.—The Commissioners of National Education, having for a considerable time adopted as a branch of instruction in one of their Model Schools the subject of Natural Philosophy and Chemistry, as applied to the arts, and having found it productive of the best results, resolved at the commencement of this year to introduce it generally into all their Model Schools. For the purpose of affording such instruction they appointed one of their Inspectors, Doctor Clarke, M.R.I.A. The course of Lectures range over the several branches of Mechanics and the Steam Engine, Pneumatics, Hydrostatics, Optics, and the elements of Geology, Electricity and Galvanism, &c. The Schools have been provided with suitable apparatus. A course of most practical lectures have been delivered, in consequence of which, not only have these subjects become familiar to the pupils, but the Teachers are now fully able to make, with success, the experiments necessary for the future illustration of those lectures.

In consequence of the many mechanical arts and trades now carried on in this town, which these lectures illustrate, the subject attracted the greatest attention, and at our Annual Public Examination the pupils were examined on these subjects for upwards of four hours.

The answering of the pupils was uniformly satisfactory, evidencing their thorough knowledge of the steam engine, both stationary and locomotive, and their intimate acquaintance with the external characters of minerals of industrial importance.

After the close of the examinations, resolutions expressive of the unabated and even increased confidence of the public in the success of the Schools, were passed and signed by the Clergymen of the town and

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I. Reports on District Model Schools.
Newry.

neighbourhood of Newry. Finally, exclusive of premiums by Doctor Clarke to Pupil-Teachers and pupils, value £2, and those awarded by the Inspectors to the meritorious pupils of this class, amounting to about the same sum, the Commissioners, to mark their sense of the practical importance of this subject, empowered Doctor Clarke to proceed, at their expense, with the Head Master, Pupil-Teachers, and eight of the most distinguished pupils of the Physical Science Class, to the neighbourhoods of Belfast, Carrickfergus, and Carrickmacross, to point out and illustrate to them, upon the spot, the geological and other interesting features of these localities, including the great salt mine lately discovered on the Marquess of Downshire's property at Carrickfergus, the gypsum deposit of Carrickmacross, together with objects of mechanical and chemical interest in some of the large flax mills and bleaching establishments—a step alike calculated to afford delight and improvement to these young persons, and to insure the approbation of all who desire that the instruction of the people should be directed towards the development of the industrial resources of the country.

Attendance of Visitors.—The attendance of visitors was, as usual, large and influential, comprehending the clergy of all denominations in and near Newry, many of the parents of the children, and several strangers. As on former occasions, the walls of the principal examination room were hung round with drawings and specimens of fancy work executed by the pupils.

Distribution of Premiums, &c.—On the following day, the 31st, the premiums and certificates were distributed to the successful candidates, in accordance with the following scale:—

MALE SCHOOL.

	£	s.	d.
Sequel Class.—Three premiums, at 3*s.* each,	0	9	0
Third Class.—Four premiums, at 3*s.* each,	0	12	0
Fourth Class.—Four premiums, at 4*s.* each,	0	16	0
Fifth Class.—Six premiums, at 5*s.* each,	1	10	0
Science Class.—Seven premiums, at 5*s.* each,	1	15	0
Writing Class.—Two premiums, at 4*s.* each,	0	8	0
Total,	5	10	0

FEMALE SCHOOL.

	£	s.	d.
Sequel Class.—Five premiums—two at 2*s.* 6*d.*, two at 2*s.*, and one at 1*s.* 6*d.*,	0	10	6
Third Class.—Six premiums—one at 3*s.* 6*d.*, one at 3*s.*, and four at 2*s.* 6*d.*,	0	16	6
Fourth Class.—Six premiums—two at 3*s.* 6*d.*, one at 2*s.* 6*d.*, and three at 2*s.*,	0	15	0
Fifth Class.—Three premiums—two at 4*s.*, and one at 3*s.*,	0	11	0
Drawing Class.—Two premiums, at 2*s.* 6*d.* each,	0	5	0
Work.—Five premiums—three at 2*s.* 6*d.*, and two at 2*s.*,	0	11	6
Total,	£3	10	0
Infants, confectionary,	1	0	0
Total amount of premiums awarded,	£10	0	0

Drawing.—From the style and execution of the drawings exhibited it is evident that this interesting and most useful branch has received much attention and care; the specimens were greatly admired and praised by all who saw them. Annexed is Mr. Brophy's Report for the year 1854 on the proficiency and progress of the drawing classes.

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I. Reports on District Model Schools.

Newry.

See some judicious remarks on this important subject, Note A, appended.

January 26th, 1855.

SIR,—I beg to submit the following brief Report on the drawing in the Newry District Model Schools for the past year.

The number who receive instruction in drawing daily is 86; of these 15 are Teachers, 46 girls, and 25 boys. The boys are less numerous than the girls in consequence of the early hour selected for them to receive their lessons being before the ordinary school time, which causes then to be but a small attendance.

Proficiency.—The Pupil Teachers and boys have a good knowledge of the principles of perspective, the laws of light and shade, and group models with an eye to picturesque effect, which shows they must have a respectable knowledge of composition. Some of the groups of models which they have arranged and drawn have elicited the admiration of all visitors to the schools. They copy also figure, ornament, and landscape, both shaded and in outline, correctly and with taste.

The girls also have a good knowledge of the first principles of perspective, draw from the models with skill and correctness, and copy ornament, landscape, and figure, both shaded and in outline, most correctly and with great feeling. I have given some of the more advanced pupils coloured examples to copy from, and, from what they have already done, I anticipate the most excellent results.

The want of a separate room for the drawing class has been a great hindrance to its complete success. A room properly lighted, in which could be placed a good collection of casts of ornament, vases, &c. (such as are in the drawing class room in the Central Model School), which would not require to be removed from their positions at the end of each lesson, as is the case at present (a great waste of time), but being always before the eyes of the pupils would tend not only to raise and improve their tastes, but would also stimulate them to greater exertions.

I am, Sir, your obedient servant,

NICHOLAS A. BROPHY.

J. Patten, Esq., M.D., Head Inspector.

Suggestions.—In concluding our Report for the year 1853, we made the following suggestions for the consideration of the Commissioners, which we again take the liberty of bringing before them, as the experience we have since had tends more fully to convince us of the great benefits which would accrue to the schools by the speedy adoption of the plan recommended.

We expressed our views in the following words: "We beg to submit, "for the consideration of the Commissioners, our impression that the "schools would be rendered still more successful by the appointment "of an Assistant-Master and Mistress—the former to take the place of "two Pupil-Teachers, and to receive board and lodging in the establishment; he, the Assistant-Teacher, should be required to teach *singing* "and *drawing*, and to devote the short time not so occupied to ordinary "school business; to take charge of the Pupil-Teachers during a portion "of their study time and when on recreation, and to take full part in "the general business of the school. The Assistant-Mistress to teach "*singing*, to take charge of one-half the education of the Monitresses, "and to act in the schools during the ordinary hours. In addition to "the benefit conferred directly on the schools by these appointments, "a more widely-extended advantage must necessarily result from "affording to the Pupil-Teachers and Monitresses—the future guides of "youth—two-fold the amount of instruction they can at present con- "veniently obtain."

The arrangement above recommended would be even more advisable now than when we first proposed it, as the Head Master is obliged to devote a portion of his time each day in giving instructions to the class in Physical Science, and in exhibiting experiments with the apparatus given into his charge by order of the Commissioners *for this purpose.* It is evident that he cannot perform this duty in addition to the ordinary routine of the school business, without an amount of labour and mental exertion quite incompatible with health.

We remain, Gentlemen, your obedient servants,

JAMES PATTEN, Head Inspector.
ALEX. JOHN SIMPSON, District Inspector.

The Secretaries,
Education Office Dublin.

NOTE A.

ON DRAWING. By MRS. MERRIFIELD, Authoress of "Ancient Art of Painting in Oil, Glass, &c."

Drawing is to be considered in two lights, namely as the foundation of the Fine Art called Painting, and as the form of expression of a universal language which all the world can understand, and which bears towards visible objects the same relation as writing does to thought. In the former point of view it may be looked upon, as regards the great mass of the people, as an amusement, and as an ornamental art; but in relation to the latter and more extended application it is an essential requirement, second only in importance to writing, and on this account should form an integral part of every scheme of education. What would the moderns have known of the History of Egypt, of Mexico, and of Nineveh, had their hieroglyphics and inscriptions in languages long since forgotten and lost, been the only records of the past? Without the sculptures on the Temples and Tombs of Egypt, the "picture writings" of Mexico, and the bas reliefs of Nineveh, what should we have known of the history and domestic life of these nations? These are records which all who will take the trouble to study them can comprehend, which he who runs may read. In the middle ages the people, who were then unable to read, learned the history of the Redeemer and the events of sacred history from the pictures and sculptures in churches. How many of those now living are as much indebted for their early information on these subjects to the prints in Mrs. Trimmer's Histories, and in D'Oyley and Mant's Bible, as to the printed type of the sacred books!

But such pictures are the productions of the master-spirits of art; they require the laborious study of years, and the application of the highest intellect, consequently the attainment of the power of producing pictures of this high class is limited to a very few. The art of drawing has, however, other uses, which are as unlimited in their application to the wants and requirements of man as those of the former class are circumscribed. It will be our object in this paper to point out the general utility of drawing, and the mode in which it may be most easily and perfectly acquired. In pursuance of this object, and with the view of strengthening our arguments, we shall quote from competent authorities such passages as we consider best adapted to place the subject forcibly before our readers, and to convince them that simple drawing—that is to say the power of representing real objects upon a flat surface in such a manner as to render them intelligible to all persons—should be cultivated by every one, and should form an integral part of general education. It is picture-writing in a universal language, and should be taught conjointly with ordinary writing.

It is a mistake to think that any great taste or genius is requisite for the attainment of this kind of drawing; the most ordinary capacity is sufficient to acquire all that is absolutely necessary. Every person who has the use of his hands and eyes can learn to write, and whoever can learn to write can also learn to draw. We think this proposition is sufficiently proved by the numbers of the industrious classes who attend the drawing-schools on the Continent, and who are now beginning to appreciate their advantages in this country. Mr. B. Waterhouse Hawkins, in his excellent paper "On Elementary Instruction in Drawing and on the best methods of communicating it to artisans and mechanics," (read before the Society of Arts,) has the following observations on this subjects :—"This useful power of drawing . . . . has been long supposed to require a peculiar faculty born with us, generally understood by the word 'genius,' which, like the natural quality called 'an ear for music,' it would be impossible to dispense with. This is only true so far as an artist, sculptor, or musician is concerned; but what is wanted is not that every mechanic or artisan should draw like an artist, or model like a sculptor. Men are not debarred from learning grammar and writing under the fear that they may not turn out poets or historians. The drawing which I propose as useful and necessary is no more than equivalent to writing the name and description of every object with which he is daily concerned, so that he may more intimately understand it and its possible refinements, and transfer this knowledge to any other to whom it may be necessary to communicate his thoughts. There are many persons who are supposed, and think themselves capable of drawing in the artistic sense, who cannot represent truly any of the ordinary objects which form the daily requirements of life." Mr. Cole, the Superintendent of the department of Practical Art, in his Address to the Members of the Institute at Bradford, said—"To draw correctly was the best evidence that you saw correctly, and by acquiring that power you immensely encourage accuracy of observation and sight." Again, he says, "Having five or six children of his own, he had found that from the very earliest period, the best way of teaching them to see correctly was to give them the power of making a straight line, and of representing forms correctly. There was scarcely any thing in the world which did not imply the necessity of seeing correctly, and this power of seeing correctly, he believed, was only to be attained by learning to draw. Whatever they might say about other education, he believed that learning to draw was of almost earlier importance than writing to the working classes, for after learning to draw correctly they would soon learn to write well." Mr. B. W. Hawkins, in the paper before quoted, observes,—"A long written description may fail to convey to our understanding that which the slightest sketch can at once fix in our minds. There is hardly any one, especially a workman, who has not experienced this. Indeed, almost all the operations of the artisan require to be made certain by his having a drawing to work from. Need I tell you how much more readily any drawing would be understood and worked from without mistakes, could the workman make such a one? Indeed it will be confessed by any intelligent man who has had the conduct of workmen in any branch of manufacture involving the production of forms, that the difference between good and bad work consists in minute differences which the educated eye at once detects, but which the uneducated workman has not the power of perceiving. Now, drawing cultivates this power of observation and perception to the greatest possible degree, as it is impossible to draw or represent the form of any object without, as it were, learning it by sight. Such intimate notice do the eyes take of the thing drawn, that the mind, as it were, becomes possessed of its shape, and can see it when not present."

If this power of delineating natural or real objects is found of such importance to the industrious classes as to meet with the direct encouragement and support of government, and if, for the purpose of attaining it, these industrious classes willingly devote to it the time they would otherwise spend in recreation, is it not reasonable to suppose that it would be equally useful to the middle and higher classes? As regards men, we believe this is universally acknowledged; there is scarcely any profession or trade in which it is not occasionally useful. We believe, however, that drawing does not form part of the general scheme of education, except in military academies; and with regard to the females of the higher and middle classes its utility has not yet been recognised.

Drawing, of the useful kind we have described, forms, however, a part of the system of education in the Female Training Schools, and as the students are drafted off as Mistresses of the different parochial schools, they will undoubtedly introduce and teach to their pupils, as part of the general education which it is their duty to impart, the useful art they have acquired. In the course of a few years, then, we may naturally expect that the art of drawing will be universally understood and practised among the better educated of the industrious classes, male and female. Now what will the middle and higher class be doing all this time? What are they doing now? Drawing, it is true, is frequently included in their scheme of education, but it is considered purely as an ornamental art, as an accomplishment, and is far from being as generally cultivated as music.—*Extract from the Educational Expositor.*

No. 3.—ANNUAL REPORT on the DUNMANWAY DISTRICT MODEL SCHOOL, by W. H. NEWELL, Esq., LL.D., Head Inspector of National Schools.

Dunmanway.

Cork, April, 1855.

GENTLEMEN,—In submitting to you, for the information of the Commissioners of National Education, my second Annual Report upon the Dunmanway District Model School, I have to state that since the date of my last Report the necessary steps were taken to have the house thoroughly repaired. The contractor is at present actively engaged in having the required works executed. No order has been issued to have the school or lecture-rooms enlarged, so that the want of accommodation referred to in my Report for the year 1853 still exists, the number of children in attendance being fully as great, while the number of applicants is greater. The rolls always contain a number within one or two of the maximum number that can be accommodated. Having, in a Report, signed by Mr. Lawler, District Inspector, and myself, set forth a detailed account of the pupils' answering in the Boys' and Girls' Schools in September last, it will not be necessary for me again to refer particularly to the proficiency and progress of the several classes. The condition of the schools is decidedly satisfactory, and the confidence of the public in their conduct and management undiminished. I may, however, add, that since September I visited the schools and examined the advanced pupils in some branches, in which, as will appear from the Report referred to, the attainments were not quite satisfactory. I allude more especially to dictation. The exercises on this subject at my last visit exhibited more satisfactory results than those performed before the public examination—some were without a single mistake, while their general character was good.

The annexed table gives a comparative view of the total number of pupils on the Rolls in average daily attendance, and on the Applicant List for each of the years from 1849 till 1854, both inclusive:—

	Boys' School.			Girls' School.		
Year ended 31st December.	Average on Roll.	Average Daily Attendance.	Applicants for Admission.	Average on Roll.	Average Daily Attendance.	Applicants for Admission.
1849	85	75	24	79	67	16
1850	95	80	–	64	54	–
1851	120	97	1	82	62	–
1852	146	122	28	107	85	14
1853	143	116	69	119	91	16
1854	142	116	89	115	90	65

The following table sets forth the amount expended by the pupils in the purchase of school requisites in each of these years:—

AMOUNT of SCHOOL REQUISITES SOLD at REDUCED RATES.

	£	s.	d.		£	s.	d.
1849 . .	10	12	11¼	1853 . .	15	7	2½
1850 . .	15	7	3¼	1854 . .	14	15	2
1851 . .	15	0	0¾				
1852 . .	19	6	9¼		£90	9	7½

The decrease in the amount of sales in each of the two last years was owing to the steady character of the attendance, which considerably lessened the number of admissions, and consequently reduced the amount of the sale of books.

As a *mixed* school for children of different religious persuasions, its success has been unquestionable. On this head I beg to subjoin a table showing the relative number of Protestant and Roman Catholic children on the Rolls during each year since 1849:—

School.	1849.		1850.		1851.		1852.		1853.		1854.	
	Protestants.	Roman Catholics.	Protestants.	Roman Catholics.	Protestants	Roman Catholics.	Protestants.	Roman Catholics.	Protestants.	Roman Catholics	Protestants.	Roman Catholics.
Boys'	5	80	1	94	13	107	16	130	22	121	27	115
Girls'	2	77	2	62	1	81	1	106	6	113	11	104
Total	7	157	3	156	14	188	17	236	28	234	38	219

Of the outstanding applicants 150 are Roman Catholics and 14 are Protestants.

According to this table the proportion of Protestants to Roman Catholics will be found to be one in six, a proportion very nearly the same as these denominations stand towards each other in the surrounding neighbourhood.

The steady and impartial conduct of all the Teachers connected with the schools has tended considerably to allay prejudices and remove misconceptions, whilst the rank to which the establishment has attained as a literary institution secures for it the support of all the parents who are uninfluenced by a party spirit, and are really anxious to have imparted to their children a sound English education. I regret, however, to have to observe, that although the Protestant laity send their children, the schools receive no countenance from the clergy of the Established Church. The Roman Catholic clergy are constant in their attention to the schools, without in any way interfering in their management; and the readiness with which the parish priest, the very Rev. John Hurly, co-operates with the Board's officers, is as important to the interests of the schools as it is creditable to himself and worthy of his position.

It is very much to be regretted that an Assistant Teacher, capable of giving instruction in drawing and singing, has not been appointed. These branches were not only successfully taught by the late Assistant, but their influence on the children was acknowledged and appreciated by the parents; while it was admitted by every one acquainted with the working of the schools that the pupils' progress in the *essential* departments of English was in no way interfered with.

In October, Mr. Cole, Secretary to the Department of Science and Art, saw some of the drawings executed at this school, with which he was so much pleased that he sent boxes of paints from London to several of the pupils. Some of the specimens he left with the Senate of the Queen's University. The establishment still maintains its high character as a Training Institution. The young men and women trained in it as Pupil-Teachers and Paid Monitors are eagerly sought after for the situations of National Teachers by Managers from all parts of the south. The supply is, however, wholly unequal to the demand. Some of these promising Teachers may be found in remote parts of the adjoining counties, where their schools never fail to exhibit well-disciplined and effectively-taught classes.

Of 22 Pupil-Teachers admitted since 1849, 13 became Teachers of National Schools, 2 went to the Special Class, 3 resigned previous to the termination of their course, and 4 are still in training. *Thirty* pupils also have obtained situations in National Schools, 26 as permanent, 2 as temporary Teachers, and 2 as Paid Monitors.

In the Girls' School, of 16 Paid Monitors 8 are now National Teachers, 2 emigrated, 1 resigned, and 5 are still in training. Eleven pupils have also taken charge of Female National Schools. So that in all 73 *persons* educated at this establishment since 1849 are now acting in the capacities of Teachers under the Board.

I have the honour to be your very obedient servant,

W. H. NEWELL, Head Inspector of National Schools.

APPENDIX G.

I. Reports on District Model Schools.

Dunmanway.

JOINT REPORT of W. H. NEWELL, Esq. LL.D., Head Inspector, and M. LAWLER, Esq., District Inspector, on the Public Examination of the Pupils attending the DUNMANWAY DISTRICT MODEL SCHOOL.

Cork, April, 1855.

GENTLEMEN,—We have the honour to state, that on Thursday, the 7th September, 1854, we held the usual public examination of the pupils attending the Dunmanway District Model School.

As on former occasions, the gentry of the vicinity and the parents of the children were invited to attend. Several of the former, and many of the latter were present, and, apparently, took a lively interest in the pupils' answering. There were some Roman Catholic clergymen present, chiefly the managers of National Schools in the district.

The school-room walls were covered with specimens of drawings, executed by the pupils, which reflected credit on them and their late teacher, Mr. Patterson. The girls' singing was very pleasing, and much spoken of by the audience.

At the close of the distribution of premiums to the successful boys and girls, some of those present were so favourably impressed with the results of the day's examination, that, although living at the distance of six and eight miles from the school, they applied to have their children admitted as pupils, purposing to take lodgings for them in the town of Dunmanway. This course has been adopted by a great many farmers and shopkeepers, who live at too great a distance to admit of their children attending daily from their own homes.

We required each of the Teachers to examine on one or two subjects in turn, omitting no subject marked as taught in the attached programme. The Agricultural Teacher examined such of the boys as learn agriculture, on the practice and theory of this useful and important study.

We need scarcely add, that this day's examination was solely for the information and satisfaction of the public. There were 137 boys and 104 girls in attendance.

On four days previously we had, ourselves, carefully and minutely examined all the children on the subjects taught to them. We examined 119 boys and 104 girls, from whom we selected, respectively, thirty boys, and thirty-six girls, as most deserving of rewards. We could have selected many more who were deserving of premiums, but the sum placed at our disposal, namely, £10, was too limited; and we felt, that to increase the number would lessen the value of each premium too much. Some pupils received as many as six premiums. The average amount received by each pupil was very nearly the same as that given in our Report of last year.

We beg to submit, in as brief terms as possible, our joint opinion of the proficiency attained by the several classes.

Fourth or Highest Class of Boys.—Present, 17; average age 13 years and 3 months. The boys in this class have latterly been reading the Fifth Book of Lessons, but their method of reading was not at all pleasing to the ear, nor smooth. They certainly read intelligently, and one could see that they understood the matter. There was a peculiarity in their delivery, which it seems idle in this locality to combat in grown boys. Nearly all can speak more or less of the Irish language, and they find it difficult to adapt intonation and inflection to English. Their *viva voce* spelling was not satisfactory, while they were imperfectly acquainted with roots and derivations. The dictation exercise, rather of a difficult character, was not well executed, the least number of mistakes being four. In grammar and parsing the answer-

Dunmanway.

ing was excellent; and their knowledge of blank maps, of local and mathematical geography, fair; but of the political distribution of mankind they were rather ignorant. The answering in the practice of arithmetic was of an average character, but in the theory deficient. Of 102 questions in geometry and mensuration (or 6 to each pupil), 27 (or 1·6 for each pupil), was the number answered; and in algebra, of 126 questions asked (or 8 to each), 56 (or 3·3 for each), was the number answered. The writing was good, but few had attained to a finished hand. Considerable progress has been made in the knowledge of book-keeping.

The foregoing remarks are to be taken as descriptive of the class generally. There were some boys whose answering on all subjects was creditable.

Third Class.—Present, 22; average age 13½ years.* The reading of the pupils in this class was very true, fluent, and intelligent; the spelling correct, and the knowledge of the principles of orthography good. However, the exercise in dictation was indifferent. Not more than four in the whole class could parse syntactically without blundering; but five others parsed tolerably, and the rest knew more or less of the parts of speech. The attainments in geography and arithmetic were fair. The writing good.

Junior Classes.—The answering of the pupils in the classes constituting the junior division of the school was satisfactory. Their intelligence was remarkable for their years, while the mechanical part of their instruction appeared to have been carefully attended to. In these classes there were 80 pupils, or very nearly two-thirds of the whole number present. On referring to the programme, it will be seen that nearly all the ordinary school branches were taught to these children. Premiums in these classes were given for the best general answering, and not for special progress in any one subject. Of the 80 pupils present, 37, or 46·25 per cent., answered, generally, very well; 31, or 38·75 per cent., answered fairly; 12, or 15·00 per cent, answered badly.

GIRLS' SCHOOL.

Fourth Class.—Present, 10; average age 15 years and 3 months. The reading of the whole class was most satisfactory; it was difficult to distinguish any superiority of one pupil over another. The *viva voce* spelling was good, and the knowledge of the Spelling-Book Superseded very correct. We gave the pupils a hard exercise in dictation, which was not at all well executed, the least number of mistakes being seven. In this respect the Fourth Class girls of last year were much superior. The acquaintance with geography, in all its departments, was excellent, and particularly with mathematical geography. We found very few sentences in prose that all could not at once parse and analyze, while three or four could transpose blank verse with facility. The writing was remarkably good and finished looking.

Third Class.—Present, 22 girls; average age 13 years and 4 months. Reading creditable. Spelling fair, but pupils failed in the dictation exercise. Three pupils answered remarkably well on grammar, and about seven others fairly. In arithmetic, of 24 questions asked of each pupil, 19·4 was the number answered, which must be admitted as a very high proportion. Progress in geography and writing satisfactory. The general answering of the junior classes was very good, as will be seen from the following statement:—Present, 72; of whom

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* The presence of four young men in this class raised the average to 13½ from 12½ years.

47, or 62·27 per cent., answered, generally, very well; 15, or 20·85 per cent., fairly; 10, or 13·88 per cent., badly.

Drawing and Singing.—Up to the time of Mr. Patterson's departure these branches were taught daily in both schools, but since he left these have been necessarily discontinued, as the present Assistant Master, who succeeded Mr. Patterson, is not qualified to teach them. The progress made in these departments proves that both branches can be taught in a first class elementary school without detriment to the pupils' acquirements in the essential subjects of reading, writing, and arithmetic. Singing was more a pastime than a task; and through its medium poetry and moral truths, elegantly expressed, were taught.

We would respectfully urge upon the Commissioners the propriety of at once sending a Teacher competent to continue these subjects, otherwise we apprehend the School will lose a portion of that high character to which they are so justly entitled.

We have the honour to be your very obedient servants,

W. H. NEWELL, Head Inspector.
MICHAEL LAWLER, District Inspector.

DUNMANWAY MODEL SCHOOL.

PROGRAMME of AGRICULTURAL CLASS.

Chemistry.—The organic elements—carbon, hydrogen, nitrogen, and oxygen; their properties; some of their more important compounds, as water, carbonic acid, ammonia, nitric acid; forms in which they enter into plants. The inorganic constituents of plants; their immediate sources, composition, or quality; proportions in plants, &c.

Geology.—Origin of soils; causes of their diversity; their classification, physical characters, chemical composition, and their relation to the rocks on which they rest.

Vegetable Physiology.—Plants—their structure, functions of the root, the stem, and the leaves; effects of heat, air, moisture, &c.; germination of seeds, growth of plants, how they are nourished, &c.; the composition of the following organic compounds, viz., starch, sugar, gum, woody fibre, gluten, albumen, and casein.

Animal Physiology.—Housing of different farm animals; ventilation, cleanliness, exercise, warmth, regularity in feeding.

Practical Agriculture.—General improvement of the soil; draining, subsoiling, trenching; trench and subsoil ploughing; common ploughing; benefits produced by them; the different methods of performing them; and the seasons at which they ought to be performed.

Manures.—Their use; how preserved and applied to the soil; general composition of the most important; quantity to be applied; and the crops for which they are suitable.

Rotation and cultivation of the different green, grain, leguminous, and other farm crops; the preparation of the soil; time and manner of sowing; quantity of seed; after-culture, &c.; and time and methods of harvesting same.

All the above (and others not mentioned) subjects have been brought before the class during the year; and on most of them the boys composing this class are prepared to be examined.

(Signed) SAMUEL BELL, Agriculturist.

December 26, 1854.

I. Reports on District Model Schools.

Dunmanway.

DUNMANWAY DISTRICT MODEL SCHOOL, 1854.

The Classes in the Girls' School will be prepared for Examination on the following subjects:—

First Class.—Spelling and Reading: the whole of First Lesson Book. Grammar: the Parts of Speech. Geography: Maps of the World and Ireland. Arithmetic: Tables, and Addition and Subtraction on Arithmeticon. Writing: on slates.

Second Class.—Junior Division—Spelling and Reading: Second Book to page 117. Grammar: as far as the Noun. Geography: Maps of the World and Ireland. Arithmetic: Tables, Notation, Numeration, Addition, Subtraction, and Multiplication. Writing: on paper, large hand. Senior Division—Spelling and Reading: the whole of Second Book and First Part of Spelling-Book Superseded. Grammar: Elements as far as the Verb, and to parse etymologically. Geography: Maps of the World and Ireland. Arithmetic: Tables, Notation, Numeration, and the four Simple Rules. Writing: on paper; small hand.

Sequel Class.—Reading: Sequel Class Book to page 144. Grammar: to page 41, and to parse syntactically any simple sentence in Lesson Book. Spelling: words occurring in Lesson Book, and Parts First and Second in Spelling-Book Superseded. Derivation: Prefixes, Affixes, and Roots in Grammar to page 134. Geography: Maps of the World, Ireland, and England. Arithmetic: Tables, Notation, Numeration, four Simple Rules, Compound Rules and Reduction. Mental Arithmetic: to Rule 15, inclusive. Writing: on paper, small hand, and, from dictation, any simple sentence in Lesson Book.

Third Class.—Reading: Lesson Book to page 168. Spelling: words occurring in Lessons; and Spelling-Book Superseded to page 70. Grammar: Dr. Sullivan's, to page 64, and to parse syntactically any sentence in Lesson Book. Derivation: the derivation of words occurring in Lessons, and the Prefixes and Affixes. Geography: Maps of the World, Ireland, England, and Europe, and the two first chapters in the Geography Generalized. Arithmetic: all the Rules to Compound Proportion, inclusive, and all the Rules of Mental Arithmetic. Writing: on paper, small hand, and, from dictation, any sentence from Lesson Book.

Fourth Class.—Reading: Lesson Book to page 161, and Selections from British Poets. Spelling: Spelling-Book Superseded to page 108. Derivation: Prefixes and Affixes, and the Latin and Greek Roots. Grammar: Dr. Sullivan's Treatise to page 131, and to parse poetry. Geography: Maps of the World, England, Ireland, and Europe, and the three first chapters in Geography Generalized. Arithmetic: all the Rules to Interest, inclusive, and all the Rules of Mental Arithmetic. Writing: on paper, small hand, and, from dictation, any sentence from Lesson Book.

DUNMANWAY DISTRICT MODEL SCHOOL.

PROGRAMME of STUDY Prepared for EXAMINATION, 1854.

BOYS' SCHOOL.

First Class.—Lesson Book: Spelling, Reading, and Explanation, to page 28. Grammar: to point out the Nouns and Verbs in their lessons. Geography: the Continents and Oceans in the Map of the World. Arithmetic: Notation and Numeration to Thousands, Addition Table and Addition. Writing: on slates.

Second Class.—Junior Division—Lesson Book: Reading, Spelling, and Explanation to page 42. Grammar: to name the Nouns, Pronouns, and Verbs that occur in the lessons. Geography: to point out the Oceans, Seas, Continents, and Peninsulas on the Map of the World. Arithmetic: the first Rule for Mental Arithmetic; Notation, Numeration, Addition and Multiplication Tables, and Simple Addition. Writing: large hand on paper. Second Class.—Senior Division—Lesson Book: Reading, Spelling, and Explanation to page 84. Grammar: to point out the Nouns, Adjectives, Verbs and Adverbs in their lessons. Geography: to point out the principal Mountains and Rivers on the Map of the World, in addition to the Continents, &c., as required of the Junior Division. Arithmetic: the two first Rules for Mental Arithmetic, Addition, and Multiplication Tables, with simple Addition and Subtraction. Writing: large hand on paper.

Sequel Class, No. 1.—Lesson Book: Reading, Spelling, and Explanation to page 92. Grammar: to refer the words of the Lessons to their respective Parts of Speech. Geography: the outlines of the Maps of the World and Ireland. Arithmetic: the three first Rules for Mental Arithmetic, the four simple Rules; Multiplication, Pence, and Shilling Tables; and Troy, Avoirdupois, and Apothecaries' Weights. Writing: large and round hand on paper. Sequel Class, No. 2.—Junior Division—Lesson Book: Reading, Spelling, and Explanation to page 63. Grammar: the Orthography of Sullivan's Grammar, and simple parsing. Spelling Book: Verbal Distinctions, Part First. Geography: Maps of the World, England, and Ireland. Arithmetic: Mental, Rules I., II., III., IV.; Tables of Pence and Shillings, of Troy, Avoirdupois, Apothecaries', and Grain Weights, of Dry and Liquid, Wine and Long Measure, and easy sums in the Compound Rules. Writing: large and small hand, on paper, and from dictation. Music—Drawing.—See their respective programmes. Sequel Class, No. 2.—Senior Division—Lesson Book; Reading, Spelling, and Explanation to page 202. Grammar: the principal paragraphs in Sullivan's Grammar to page 54, and parsing, including simple cases of government and concord. Arithmetic: Mental, to Rule VII., inclusive; all the Tables of Weights and Measures, and the Compound Rules and Reduction. Geography: Maps of the World, England, Ireland, and Scotland. Spelling Book: Verbal Distinctions, Part First. Writing: same as Junior Division. Music—Drawing.—See their respective programmes.

Third Class.—Lesson Book: Reading and Explanation to page 156, inclusive. Grammar: to be acquainted with the Elements to page 84, Dr. Sullivan's Treatise, and to parse syntactically prose sentences selected from their Lesson Book. Spelling Book: Verbal Distinctions, parts 1st and 2nd, and the Rules for Spelling. Derivation: the principal Latin Roots, Prefixes and Affixes. Geography: Maps of the World, Europe, England, Scotland, and Ireland, and the four first Chapters of the Geography Generalized. Arithmetic: Mental, to Rule XII., inclusive; Fractions, and Simple Proportion, Large Treatise. Bookkeeping: to the end of Set IV., Board's Treatise. Mensuration: to the Circle, page 41, Board's Treatise. Algebra: Definitions, Addition, Subtraction, and easy exercises in Simple Equations. Geometry: Definitions, and in the 20th Proposition, First Book in Thomson's Euclid. Writing: on paper from copy-lines and from dictation, letter writing. Music, Drawing, Agriculture.—See their respective programmes.

Fourth Class.—Lesson Book: Reading and Explanation to page 201, Fourth Book of Lessons, and the Lessons on Physical Geography in the Fifth Book. Grammar: the Rules of Syntax, in addition to what is required of the Third Class, and to parse sentences in prose and

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poetry. Spelling Book: to the end of the Rules for Spelling. Derivation: the principal Latin and Greek Roots, and the Prefixes and Affixes. Geography: Maps of the World, Europe, England, Scotland, Ireland, and the United States, and the nine first chapters in the Geography Generalized. Arithmetic; all the Rules for Mental Arithmetic, Vulgar and Decimal Fractions, Simple and Compound Proportion, and Practice, Board's Large Treatise. Bookkeeping: Sixth Set, Board's Treatise.. Mensuration: Plane Surfaces to page 60, inclusive, and Timber Measure, and Carpenters' Work, Board's Treatise. Geometry: Thomson's Euclid, Book I. Algebra: Definitions and Simple Equations. Writing: on paper from copy-lines, dictation, and letter-writing. Music, Drawing, Agriculture.—See programmes on these subjects.

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No. 4.—JOINT REPORT for the year 1854, upon the ATHY DISTRICT MODEL SCHOOL and the PUBLIC EXAMINATION held therein, by TIMOTHY SHEAHAN, Esq., A.M., Head Inspector, and JOHN MOLLOY, Esq., District Inspector.

GENTLEMEN,—We have the honour to submit to you, for the information of the Commissioners of Education, this, our first Report on the Athy Model School, which did not come under our inspection until several months in the beginning of the year had elapsed.

State of House.—The house and premises continue in good repair; but, as stated frequently during the year, some of the rooms, in addition to those set apart for school purposes, are much in need of cleaning up—the walls being discoloured from damp, &c.

Attendance.—The numbers on the rolls in the Male School have been nearly the same as in the previous year; while in the Girl and Infant Schools there has been a decided increase. The average attendance, too, it will appear from an inspection of the subjoined Table, is much above that for the corresponding periods in the year 1853. This increase, we trust, we are justified in attributing to an enlarged appreciation of the superior education conferred in this establishment, and a prevailing desire to secure it.

TABLE showing the Highest Number on Rolls and the Average Attendance in each Month since opening of Schools in August, 1852.

Months.	Highest Number on Rolls.									Average.								
	In 1852.			In 1853.			In 1854.			In 1852.			In 1853.			In 1854.		
	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.	Boys.	Girls.	Infants.
January, .	–	–	–	112	55	32	123	37	38	–	–	–	73	27	15	65	18	15·7
February, .	–	–	–	120	57	33	123	42	45	–	–	–	78	28	14	83	33	30·5
March, .	–	–	–	120	57	30	124	47	50	–	–	–	81	30	20	79	36	39·3
April, . .	–	–	–	118	42	34	116	52	53	–	–	–	77	22	24	64	32	33·3
May, . .	–	–	–	120	41	49	116	61	58	–	–	–	89	29	31	80	39	39·3
June, . .	–	–	–	125	45	46	126	56	55	–	–	–	92	31	32	88	40	35·5
July, . .	–	–	–	126	49	49	126	56	59	–	–	–	94	32	37	82	43	41
August, .	26	7	8	126	50	51	126	52	60	19	3·89	6	70	29	29·5	75	32	40
September, .	48	34	18	126	51	52	126	56	60	35	18	8	73	31	31	80	38	43
October, .	72	48	21	116	45	46	122	63	61	51	21	13	68	24	28	78	45	46
November, .	94	62	28	124	45	45	132	67	64	65	30	16	83	30	26·5	86	46	46
December, .	100	47	28	126	37	40	123	67	64	73	28	14	77	24	17	93	49	45

Of the pupils whose names were removed from the books of the Male and Female Schools,

Boys		Girls		
5	boys and	–	girls	went to business.
1	,,	2	,,	were apprenticed.
6	,,	3	,,	finished their education.
19	,,	2	,,	employed at home.
8	,,	10	,,	went to other schools.
2	,,	1	,,	appointed as Pupil-Teacher, Monitor, and Monitress, respectively.
–	,,	2	,,	sick.
–	,,	1	,,	died.
39	,,	4	,,	struck off for irregular attendance.

Ages.—From the subjoined statement it will be seen that seventy-eight boys and thirty-five girls have not attained their thirteenth year; and that forty boys and nineteen girls are thirteen years of age or upwards. The children in the Infant School, with one exception, range from three to seven years, inclusive :—

Years.	Boys.	Girls.	Infants.	Years.	Boys.	Girls.	Infants.
3	–	–	4	11	13	12	–
4	–	–	11	12	18		
5	–	–	16	13	10	3	–
6	–	–	16	14	9	–	–
7	3	–	6	15	6	8	–
8	13	11	1	16	12	7	–
9	15	–	–	17	2	–	–
10	16	12	–	18	–	1	–
				19	1	–	–

Average Age for Boys, ...	11·61
,, Girls, ...	11·75
,, Infants, . . .	5·5

Occupation of Parents.—Annexed to the Report will be found a Table showing, in detail, the occupation, trade, or profession of the children's parents; the following summary will give a sufficiently accurate notion of the different grades :—

47	were children of	Labourers, Cottiers, and Caretakers.
8	,,	Servants.
40	,,	Farmers, Gardeners, and Stewards.
53	,,	Mechanics.
9	,,	Petty Public Officers.
10	,,	Pensioners and Soldiers.
47	,,	Shopkeepers and persons in business.
6	,,	Clergymen.
10	,,	Persons not in business.

School-Fees.—The sum received from the pupils as school-fees was more by £4 14*s.* 5*d.* than in 1853; this increase, however, was confined to the Girl and Infant Schools, being in each case, respectively, £3 2*s.* 2*d.* and £3 14*s.* 4*d.* The gross receipts on the year in the Male School were less by £2 2*s.* 1*d.* than in the previous year.

SCHOOL-FEES received during Twelve Months ending with December,

	1853.			1854.		
	£	*s.*	*d.*	£	*s.*	*d.*
Boys, ...	35	17	6	33	15	5
Girls, ...	6	19	7	10	1	9
Infants, ...	7	14	1	11	8	5
Total, . .	£50	11	2	£55	5	7

The scale of charges originally determined on by the Commissioners for admission to the several District Model Schools, is in force here;

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but the exact proportions to be admitted at the several rates have not been strictly observed, as will appear from the following summary:—

	1*d.* per week.	2*s.* 6*d.* per quarter.	5*s.* per quarter.
Boys paying,	68	27	23
Girls,	36	17	1
Infants,	46	9	3
Total	150	53	27

Any observations we might feel disposed to offer on the general expenditure of the establishment must be necessarily incomplete, an entire quarter having elapsed before we got charge of it.

Requisites.—£9 1*s.* 9*d.* were paid by the pupils for books and stationery during the year, being for Male, Female, and Infant School, respectively, £6 2*s.* 9¼*d.*, £2 14*s.* 11½*d.*, and 14*s.*

Religious Denominations of Children.—The following statement will show the religious denomination of the pupils in attendance during the year:—

	Boys.	Girls.	Infants.	Total.
Established Church,	17	11	13	41
Roman Catholics,	91	43	42	176
Society of Friends,	4	–	–	4
Wesleyan Methodists,	5	–	2	7
Dissenters,	1	–	1	2

We are happy to be able to state, that during the entire year the conduct of the children, in their intercourse with each other, has been influenced by the most kindly feelings. A solitary complaint, or a report of the slightest disagreement in this respect, has never reached us.

Pupil-Teachers.—When we got charge of this institution, we found the teaching staff to consist, in the Male School, of a Head Teacher, four Pupil-Teachers, and one Monitor; in the Female School, of a Mistress and four Paid Monitresses, one of whom assisted every alternate week in the Infant School, in which there were a Teacher and an Assistant. This teaching power we found to be unequal to the wants of the Male School. Some of the Pupil-Teachers were very limited in literary acquirements, and had got little, if any, previous training in the methods of teaching and examining; and though every available means were had recourse to in order to remedy this evil, the portion of the School with which alone they could be intrusted—the junior—we found to be—as must have been expected—in not the most satisfactory state.

There is much difficulty at times in procuring young persons of sufficient acquirements and suitable age for these situations; consequently, persons may, and must, be admitted who are confessedly deficient; and when, by close application on their part, and unremitting attention on the part of the Head Teacher, they have attained a suitable amount of information, and some facility in communicating it to the pupils, their time of service in the house expires, vacancies are created to be filled by others equally deficient as they were, requiring the same extra-supervision and teaching, often to the detriment of the general efficiency of the School. This difficulty can be perhaps best met by extending the time of service for these young men to eighteen months or two years. Some allowance to procure the ordinary necessaries, and to meet their trifling incidental expenses, would fully reconcile them to the extended period of training, particularly as, at its expiration, they would be fully competent to take charge of Schools in good, remunerative districts of the country, or to fill the vacancies on the Special Class. This arrangement, too, would afford full time to the Paid Monitors of the surrounding districts to complete their full course of four years, and to acquire an amount of intelligence and an aptitude for teaching which must render them very desirable and efficient assistants on their appointment to the vacant Pupil-Teacherships in Model Schools.

The Paid Monitresses *now* receive extra instruction during, at least, one hour every day, from the Mistresses of the Female and Infant Schools alternately. As there was no adequate arrangement for this purpose previously, we found them rather deficient.

We now proceed to give a few details regarding the manner in which the pupils acquitted themselves at the General Examinations to which we subjected the three departments of the School, and which, extending over eight days, enabled us to test the several classes in the programmes supplied to us by the Teachers, and to select the most meritorious pupils for the rewards placed at our disposal by the Commissioners. Having completed the private examinations, we issued printed cards of invitation to the gentry and respectable inhabitants, requesting their attendance at the Annual Public Examination on the 14th December; we have been assured, that on no former occasion was the attendance so numerous.

As we had arranged that the business of the day should commence with the examination of the pupils in the Infant School, the Teacher, Miss Palmer, questioned them on the various subjects they had been taught during the year. The answering was, in all respects, good, in several, excellent, viz., Geography, Blank Maps, Tables, &c. The room being now filled with visitors, and there being several on the corridor who could not be accommodated, we proceeded to the Female School, which was very neatly fitted-up by the Mistress, Mrs. Reilly. Here most of the classes were examined, either by their respective Teachers or ourselves; and at various intervals during the day the pupils—having been questioned on the theory of music—performed several songs, rounds, &c., under the direction of Mr. Lyons, Teacher of vocal music, with much taste and accuracy, considering the very short time they had been under his instruction.

Results of the Examination.—Most of the pupils in the advanced classes read with fluency, and showed by their answering that they had acquired an accurate knowledge of the subject-matter of their respective lessons. The junior classes we cannot speak favourably of, for the reasons assigned in a former part of this Report.

Writing from Dictation.—This branch received a large amount of attention, as appeared from the facility and correctness with which the pupils performed the exercises required of them.

Arithmetic.—Many of the questions proposed in this branch were worked correctly; but owing to excitement, perhaps, or some other cause, the pupils failed in that readiness and accuracy which they exhibited on other occasions.

Geography.—The answering in this branch was satisfactory; but with the exception of one or two classes, the children did not exhibit sufficient facility in tracing blank maps. Some of the Fourth Class in each School were acquainted with the elementary principles of mathematical geography.

Grammar.—The pupils had not so intimate a knowledge of the text as we consider desirable; this appears to have arisen from the fact that they were not introduced to the manual on this subject, as a class-book, at a sufficiently early period.

Writing.—Though many of the boys write a bold and legible hand, there is, in general, a tendency to careless and hurried execution. In the Female School the specimens are clean and executed with care.

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Book-keeping and Mensuration.—One boy had acquired a very respectable knowledge of these subjects; but having caught fever, he was unable to attend the Public Examination.

Needlework.—The Mistress of the Female School gives instruction in plain and fancy work. Some pieces of the latter were purchased and others ordered by ladies who visited the establishment during the year.

Premiums.—At the close of the examinations, the names of the pupils to whom premiums were awarded were read out; the amount allotted to each was given on a subsequent day.

The Rev. J. Hall then rose and submitted the following statement for the approval of the persons present, having prefaced it by some appropriate observations:—

"We, the parents of the pupils and the friends of this institution, beg to express the pleasure we have had in attending the Public Examinations of the Athy District Model National Schools, held on Thursday, 14th December. The examinations, which were conducted in a most efficient manner, under the superintendence of Timothy Sheahan, Esq., A.M., Head Inspector, and of J. Molloy, Esq., and J. Wilson, Esq., A.M., District Inspectors, embraced almost all the branches of a complete English education, together with an outline of agricultural science. The answering, in general, was highly creditable to the Teachers, while, on the part of the pupils, it manifested a degree of attention and proficiency truly gratifying.

"The musical exhibition, under the superior management of Mr. P. J. Lyons, was not the least interesting part of the proceedings—all the pupils appearing to engage in it; and the sweet manner in which several exquisite pieces were performed not only elicited the applause of those present, but evinced how much our youth have appreciated this department of their education.

"These Schools appear to be in a flourishing state; and whether we take into account the increase in the classes, or the appearance of the pupils, or the attention and urbanity of the officers, or the instruction imparted, we have much reason to record our conviction of their efficiency.

"In fine, we would embrace this opportunity of most respectfully representing to the Commissioners, through their agents here present, the propriety of appending classics to their course of instruction, and of thus rendering their system more complete, and, at the same time, more conducive to the educational interest of the country.

"Signed on behalf of the parents, &c., present,

"A. Haughton.
"J. B. Meredyth, Solicitor.
"H. F. M'Donald, Clerk.
"T. Jameson, Clerk.
"J. Hall, Presbyterian Minister."

We beg to direct attention to the concluding paragraph, and to say that we fully and most cordially concur in the views advanced there with reference to the introduction of the classics, and respectfully recommend it to the favourable consideration of the Commissioners.

We have the honour to remain, Gentlemen, your obedient servants,

Timothy Sheahan, A.M., Head Inspector.
John Molloy, District Inspector.

Appendix A.

Classification of Children on Rolls, 12th October, 1854.

	Boys.	Girls.	Infants.
First Book,	4	5	34
Second Book,	34	10	22
Sequel,	39	15	2
Third Book,	28	12	–
Fourth Book,	13	13	–
Fifth Book,	–	–	–

	Boys.	Girls.	Infants.
Elements of Grammar,	80	30	–
Parsing and Syntax,	13	25	–
Descriptive Geography,	118	55	58
Mathematical Geography,	-	13	–
Arithmetical Tables,	82	55	58
Simple Rules,	35	30	–
Compound Rules and Reduction,	28	18	–
Proportion and above,	36	7	–
Mental Arithmetic,	36	55	–
Geometry,	–	–	–
Algebra,	–	–	–
Mensuration,	6	–	–
Book keeping,	6	–	–
Sacred Poetry,	–	–	–
Writing on Slates,	3	8	58
,, on Paper,	115	47	–
,, from Dictation,	36	25	–
BRANCHES FOR FEMALES.			
Sewing,	–	43	–
Knitting,	–	4	–
Straw-platting,	–	–	–
Fancy Work,	–	8	–

PROGRAMME OF EXAMINATION, ATHY DISTRICT MODEL SCHOOL,

DECEMBER 5TH, 1854.

BOYS' SCHOOL.

First Book.—Reading: Lesson Book to page 18. Arithmetic: read small numbers; Multiplication Table, three times.

Second Book (second division).—Reading: Lesson Book to page 74. Writing: paper, elements. Arithmetic: Numeration, read five figures; work easy sums in Addition; Multiplication Table, five times. Geography: part of Ireland.

Second Book (first division).—Reading: Lesson Book through. Writing: paper, large and round hand. Arithmetic: Numeration, hundreds of millions; definitions of Simple Rules; work easy questions in first three Rules. Grammar: name the Parts of Speech, define noun and adjective, and give examples. Geography: Maps of World and Ireland.

Sequel, No. 1.—Reading: Lesson Book through; Spelling-book Superseded—nine boys to page 31. Writing: paper, large, round, and small hand. Arithmetic: nine in Compound Rules, seven in Simple Rules. Grammar: can define the Parts of Speech. Geography: Maps of World and Ireland.

Sequel, No. 2.—Reading: Lesson Book through; Spelling-book to page 36. Writing: round and small hand. Arithmetic: four boys in Simple Rules, the remainder (sixteen) in Compound Rules and Reduction. Grammar: can define the Parts of Speech. Geography: Europe, Asia, and Ireland.

Third Book (second division).—Reading: Lesson Book to page 166. Spelling Book to page 40. Writing: small hand, dictation. Arithmetic: one in Compound Rules, thirteen in Proportion and Practice. Grammar: Etymological parsing. Geography: Maps of the World, Europe, Asia, and Ireland.

Third Book (first division).—Reading: Lesson Book through, the Poetical Pieces with some taste. Spelling-book: Rules for spelling, prefixes and affixes. Writing: dictation. Arithmetic: two boys in Compound Rules; Proportion and Practice, Interest and Mental

Arithmetic. Grammar: Etymological parsing. Geography: proofs of the Earth's sphericity; Local Geography of the Great Divisions of the Earth, Ireland and England. Book-keeping: one boy, two sets.

Fourth Book.—Reading: the whole of the Lesson Book. Spelling-book: Rules for Spelling, prefixes and affixes. Writing: dictation. Arithmetic: Practice, Tare and Tret, Interest, and Mental Arithmetic, except two boys. Grammar: Syntactical parsing. Geography: proofs of the Earth's sphericity; Local Geography of the Great Divisions of the Earth, England, and Ireland. Book-keeping: three boys, two sets; three boys, three sets; one boy, six sets.

JOHN WALSH,
Master of Boys' School.

PROGRAMME FOR FEMALE SCHOOL.

First Class.—First Lesson Book; Multiplication Table as far as six times; Notation and Numeration as far as five places of figures; Addition, definitions of the simple terms in Geography and Grammar, and can write large-hand on slates.

Second Class.—Second Lesson Book to page 136. Arithmetic: to Simple Multiplication, inclusive. Grammar: the Parts of Speech. Geography: Maps of the World and Ireland. Some can write on paper, others on slates.

First Sequel.—First Sequel to page 82. Arithmetic: to Simple Division, inclusive; Tables. Grammar: the Parts of Speech. Spelling-book as far as page 25; can write large and small hand. Geography: Maps of the World and Ireland.

Second Sequel.—Second Sequel to page 144; reading, spelling, and explanation. Arithmetic: Simple and Compound Rules, mentally and on slates. Grammar: Parts of Speech. Geography: Maps of the World, Europe, and Ireland. Writing on paper.

Third Class.—Third Book to page 156; reading, spelling, and explanation. Arithmetic: Simple and Compound Rules; three are in Reduction and one in Proportion; Mental Arithmetic. Grammar: to page 47, parsing sentences in prose. Geography: Maps of the World, Europe, Ireland and England. Spelling-book to page 31; rules for spelling.

Fourth Class.—Fourth Book, reading, spelling, and explanation of the three Natural Kingdoms; Descriptive Geography, Scripture History, and Lessons on Political Economy. Grammar: parsing and Syntax. Geography: Maps of the World, Europe, Asia, Africa, and the British Isles; Geography Generalized to page 31. Historical Sketches of Great Britain and Ireland. Spelling-book to page 51; rules for spelling; Latin roots, Latin, Greek, and Saxon prefixes and affixes. Arithmetic as far as Interest; Mental Arithmetic.

ANNE REILLY, Teacher.

PROGRAMME FOR INFANT SCHOOL.

1*st Division of First Class.*—Reading, spelling, and explanation of Lessons from page 16 to end of book. Geography: outlines of the Map of the World. Arithmetic: Tables up to five times; Addition and Subtraction by help of Arithmeticon. Grammar: Parts of Speech.

2*nd Division of First Class.*—The Alphabet, spelling, and reading, to page 16.

1*st Division of Second Class.*—Spelling, reading, and explanation of Lessons from page 31 to end of book. Geography: outlines of the Maps of Europe, Asia, Africa, America, and Ireland. Grammar: Parts

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of Speech. Arithmetic: Multiplication, Pence, and Shilling Tables; Addition and Subtraction on slates; Multiplication and Division by help of Arithmeticon.

2nd Division of Second Class.—Spelling and reading to page 31. Geography: outlines of the Maps of the World and Europe. Grammar: Parts of Speech. Tables.

1st Sequel Class (to page 126).—Reading, spelling, and explanation of Lessons. Geography. Tables. Grammar: Parts of Speech, same as Second Class.

All learn Natural History, Object Lessons, Singing and Writing, with the exception of the Alphabet Class.

HARRIET PALMER, Teacher.

APPENDIX B.

OCCUPATION of PARENTS of PUPILS on School-Rolls, week ending 1st October, 1854.

Occupation of Parents.	Boys.	Girls.	Infants.	Occupation of Parents.	Boys.	Girls.	Infants.
Clergyman,	4	–	2	Shoemaker,	–	3	–
Contractor and Builder,	4	–	2	Miller,	–	1	–
				Teacher,	–	2	–
Agent,	1	1	2	Barber,	–	1	–
Steward,	2	2	2	Publican,	1	2	–
Shopkeeper,	10	6	14	Watchmaker,	1	–	–
Governor of Gaol,	1	1	–	Baker,	1	–	–
Farmer,	21	5	4	Sawyer,	1	–	–
Railway Officer,	–	–	1	Nailer,	2	–	–
Pensioner,	6	2	1	Merchant,	2	–	–
Agriculturist,	–	1	1	Cottier,	5	–	–
Gardener,	1	–	1	Gentleman,	3	–	–
Carpenter,	4	3	3	Dealer, &c.,	8	–	–
Mason,	1	–	2	Chemist,	1	–	–
Painter,	–	–	2	Carman,	3	–	–
Smith,	–	4	5	Caretaker,	3	–	–
Servant,	5	1	2	Law Clerk,	1	–	–
Tailor,	3	3	1	Law Messenger,	1	–	–
Butcher,	3	3	1	Lock-keeper,	2	–	–
Letter Carrier,	–	–	1	Soldier,	1	–	–
Labourer,	12	13	11	Storekeeper,	3	–	–

APPENDIX C.—RETURN of SCHOOL FEES from opening to December, 1854.

Months.	1852.									1853.									1854.								
	Boys.			Girls.			Infants.			Boys.			Girls.			Infants.			Boys.			Girls.			Infants.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
January,		–			–			–		3	18	8	0	12	11	0	4	11	3	5	7	0	11	10	0	7	8
February,		–			–			–		2	13	11	0	16	10	0	6	5	2	3	10	1	3	2	0	16	2
March,		–			–			–		2	5	6	0	10	2	0	8	1	3	9	3	0	11	8	1	5	4
April,		–			–			–		3	5	3	0	11	7	1	0	8	2	3	11	0	12	1	0	14	9
May,		–			–			–		3	18	10	0	13	1	0	17	5	3	5	10	1	11	9	1	4	0
June,		–			–			–		3	2	11	0	18	10	0	11	3	3	1	9	0	16	2	0	12	7
July,		–			–			–		2	19	8	0	11	7	1	1	10	3	11	6	0	10	10	1	4	3
August,	3	0	10	0	8	4	0	6	3	1	3	9	0	5	3	0	5	4	1	14	0	0	10	6	0	12	10
September,	1	16	3	0	9	2	0	7	2	4	3	5	0	11	3	0	19	8	3	10	10	1	5	0	1	10	1
October,	1	14	1	0	6	5	0	3	4	3	0	0	0	16	10	0	8	4	2	10	2	0	18	9	1	7	10
November,	3	7	3	1	0	0	0	5	0	2	16	7	0	7	5	1	3	6	3	5	11	0	15	0	0	14	3
December,	1	15	2	0	6	6	0	6	11	2	9	0	0	4	0	0	7	1	1	12	10	0	15	0	0	18	8
Total,	11	18	7	2	10	5	1	8	8	35	17	6	6	19	7	7	14	1	33	15	5	10	1	9	11	8	5

APPENDIX G.

I. Reports on District Model Schools.

Athy.

APPENDIX D.

AMOUNT of SCHOOL REQUISITES sold in 1854.

Months.	Boys.			Girls.			Infants.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
January, .	0	10	2½	0	0	4	0	0	5½	0	11	0
February, .	0	4	7	0	4	4½	0	1	7½	0	10	7
March, . .	0	10	10½	0	4	7	0	1	3½	0	16	9
April, . .	0	7	9	0	3	4½	0	0	8	0	11	9½
May, . .	0	9	0	0	3	1½	0	1	0	0	13	1½
June, . .	0	18	3½	0	3	8½	0	1	1	1	3	1
July, . .	0	9	11½	0	7	11	0	1	3½	0	19	2
August, . .	0	3	2	0	0	8	0	0	3	0	4	1
September, .	0	12	8	0	3	8	0	3	3	0	19	7
October, .	0	12	6½	0	4	0½	0	0	11	0	17	6
November, .	0	11	4½	0	4	5	0	1	4½	0	17	2
December, .	0	12	4½	0	4	9	0	0	9½	0	17	11
Total, .	6	2	9½	2	14	11½	0	14	0	9	1	9

Clonmel.

No. 5.—REPORT upon the CLONMEL DISTRICT MODEL NATIONAL SCHOOL, for the year 1854, by TIMOTHY SHEAHAN, Esq., A.M., T.C.D., Head Inspector of National Schools.

Kilkenny, June 1, 1855.

GENTLEMEN,—I have the honour to submit for the information of the Commissioners, the following Report upon the Clonmel District Model School, for the year 1854.

House and Grounds.—I have still to complain of the inadequacy of the accommodation afforded in the school-rooms, and the absence of such class-rooms as are attached to the male and female departments in the Model Schools recently built. The house has undergone repairs within the past year, and the defects, so frequently complained of, have been in a great measure remedied; but the necessary enlargement of the Institution, not only to accommodate the present, but meet the increased attendance, which the growing confidence in the schools is likely to secure; and the unfinished state of the play-grounds, as well as the proper laying out of the lands attached thereto, urge themselves strongly upon the immediate consideration of the Commissioners.

Attendance.—In the Male and Female Schools the attendance has been somewhat less than that for the previous year, while in the Infant School there has been an increase. The following table gives a return of the attendance for both years:—

SCHOOL.	1853.			1854.		
	Daily Average.			Daily Average.		
	On Roll.	Present.	Present to 100 on Roll.	On Roll.	Present.	Present to 100 on Roll.
Boys, . .	127	116	92	117	96	82
Girls, . .	79	63	79	71	53	74
Infants, . .	49	34	69	52	39	75
Total, .	255	213	80	240	188	78·3

Clonmel.

In the Boys' School this falling off in the attendance may be accounted for by the removal of several children from the neighbourhood, as will appear on reference to Appendix [1]; while in the Female School the cause can be traced to the change and removal of the Head Teachers, which took place early in the season, in consequence of which the business of the school was, for a time, materially interrupted, and the average attendance seriously diminished.

Ages of Pupils.—A return of the ages of the pupils on the School Rolls, on the 18th of November, 1854, is given in Appendix [2]. From this it will be seen that the average ages in the several Schools are as follows:—

In Boys' School, ...	11·09
Girls' School, ...	11·68
Infants' School, ...	5·18

For the year 1853,—

The Average Age in the Boys' School was,	10·5
,, Girls' School,	11·75
,, Infants' School,	5·25

In the Boys' School alone is there any material difference in the average ages; and this is of the more importance, inasmuch as it shows that parents are becoming disposed to permit their children to remain at school for a longer period than they were before accustomed to do.

Occupation of Parents.—A return of the occupation of the parents is given in the Appendix [3]. It is not at all different from that in the past years, and in it will be found represented all the grades of the social scale. This is peculiarly gratifying, inasmuch as it affords satisfactory evidence that the Schools still continue to possess the confidence of all the parties that connected themselves with them in the commencement.

School Fees.—The amount of fees paid by the pupils this year was £82 7*s.* namely,—from the boys, £47 12*s.* 2*d.*; from the girls, £23 2*s.* 8*d.*; and the infants, £11 12*s.* 2*d.*

The pupils on the rolls for the week ending 18th November, 1854, were paying as follows:—

	Boys.	Girls.	Infants.	Total.
At 5*s.* per quarter, ...	18.	5	–	23
,, 2*s.* 6*d.* per quarter, . .	44	33	10	87
,, 1*d.* per week, ...	59	41	56	156
Total, . .	121	79	66	266

School Requisites.—The amount received this year for requisites sold at reduced rates was £26 16*s.* 6*d.*, exceeding that received in the previous year by £6 12*s.* 4*d.* In Appendices [4 and 5] will be found returns of the sums received each month, both in the way of school fees and for requisites sold to the pupils of the several schools.

Religious Instruction.—The pupils on the rolls are classed as follows, according to the religious persuasion to which they respectively belong.

	Boys.	Girls.	Infants.	Total.
Roman Catholics, ...	91	70	53	214
Established Church, . . .	22	8	8	38
Presbyterians, ...	1	–	2	3
Unitarians, ...	4	1	2	7
Christian Brothers, ...	3	–	1	4
Total, . .	121	79	66	266

The arrangements for religious instruction continue unchanged, and the same uninterrupted harmony and kindly feeling that it was my pleasing task to bring under your notice in my former Report are to be still witnessed among the pupils of the different denominations.

Drawing.—Instruction in this department, which had been interrupted for some time, has been lately resumed. Mr. Healy, a highly qualified master, has been recommended to us from the Department of Science and Art, Marlboro' House, London. His time is divided between the Model Schools and the Clonmel Mechanics' Institute; and the salaries paid by both departments are such as to secure permanently the services of a respectable and efficient master. It was to myself highly gratifying, to assist in forming a connexion of this nature with an institute so admirably managed by the President and the active and intelligent gentlemen that form the committee; and I gladly avail myself of this opportunity, to acknowledge the deep interest the members of it have always evinced in the success of the Model Schools, and their active co-operation towards that end, on every occasion that their services were required.

Extent of Instruction.—In addition to the branches comprised in the ordinary course, instruction in Physical Science and Physiology has been, now for the first time, given by a Lecturer specially provided for the purpose. It is intended only for pupils of the fourth and fifth classes who have been well made up in the elementary branches. On reference to the subjoined Report of the Examination, which has been prepared by the District Inspector, it will be seen that the answering of the pupils on these subjects was alike creditable to the industry and capacity of the pupils, and the untiring zeal and successful exertions of their highly talented Lecturer, Dr. Clarke; who with the aid rendered by the Head and Assistant Masters, was able in a few months, to impart to them so large an amount of varied and practical knowledge, as they exhibited during the examination.

Order and Discipline of Pupils.—On these points I am happy to be able to report most favourably. There have been very few cases calling for animadversion, and not a single one that was deemed of sufficient importance to bring under the notice of the Commissioners.

Pupil-Teachers.—In Appendix [6] will be found a Return of the names and destinations of the Pupil-Teachers who have left these Schools during the year 1854, and up to the present date. Their conduct during the period of their residence in the Institution, was most exemplary; while their attention to the duties that devolved upon them as Teachers, and the proficiency made by them in their own studies as pupils, have gained for them, without exception, the most favourable opinions, both of the Head Master and of the Resident Inspector.

I have the honour to remain, Gentlemen, your obedient servant,

TIMOTHY SHEAHAN, Head Inspector.

The Secretaries.

1.

RETURN of PUPILS Admitted and Struck Off the Rolls during the year 1854.

	Boys.	Girls.	Infants.
Admitted, ...	173	135	128
Struck off, ...	166	120	11

DESTINATION of the above PUPILS struck off Rolls.

	Boys.	Girls.	Infants.
Appointed to place of Pupil-Teacher, . . .	2	–	–
Left the place, ...	14	10	
Emigrated, ...	6		–
Went to different schools, ...	12	8	5
Employed at home, ...	29	12	–

APPENDIX G.

I. Reports on District Model Schools.

Clonmel.

DESTINATION of the above PUPILS struck off Rolls—*continued.*

	Boys.	Girls.	Infants.
Apprenticed,	5	3	–
Went as Assistant in a School,	1	–	–
Got situations as clerks,	2	–	–
Ill health,	2	6	10
Distance and winter,	6	–	3
Struck off and re-admitted during year,	87	50	44
Appointed Monitresses,	–	5	–
No cause assigned,	–	24	31
Sent to Girls' School,	–	–	9
,, Boys' School,	–	–	8
Total, as above,	166	120	114

2.

AGES of Pupils on Rolls of Schools, 18th November, 1854.

Age.	Boys.	Girls.	Infants.	Age.	Boys.	Girls.	Infants.
3 Years,	–	–	6	11 Years,	15	11	–
4 ,,	–	–	15	12 ,,	19	20	–
5 ,,	–	–	17	13 ,,	18	9	–
6 ,,	–	–	18	14 ,,	8	7	–
7 ,,	–	–	9	15 ,,	5	5	–
8 ,,	16	4	1	16 ,,	1	2	–
9 ,,	15	9	–	17 ,,	–	1	–
10 ,,	23	11	–	18 ,,	1	–	–

Average Ages of pupils in Boys' School is,	11·09
,, in Girls' School,	11·68
,, in Infants' School,	5·18

RELIGIOUS DENOMINATIONS of the PUPILS on the Rolls on 18th November, 1854.

	Boys.	Girls.	Infants.	Total.
Roman Catholics.	91	70	53	214
Established Church,	22	8	8	39
Presbyterians,	1	–	2	3
Unitarians,	4	1	2	7
Christian Brothers,	3	–	1	4
Total,	121	79	66	266

3.

OCCUPATION of PARENTS of PUPILS on School-Rolls, week ending 18th November, 1854.

Occupation.	Boys.	Girls.	Infants.	Occupation.	Boys.	Girls.	Infants.
Builder,	5	–	–	Carpenter,	1	1	1
Blacksmith,	2	1	1	Draper,	2	–	–
Bacon-cutter,	2	–	–	Excise Officer,	2	–	–
Clergyman,	3	–	–	Baker,	2	–	–
Clerk,	10	2	7	Farmer,	18	25	7
Car-driver,	–	2	–	Gardener,	2	1	2
Cork-cutter,	–	–	2	Grocer,	2	1	7
Cutler,	1	1	2	Gilder,	2	1	–
Cabinet-maker,	–	1	1	Gunsmith,	1	–	–
Corn Merchant,	2	–	–	Hairdresser,	–	2	–
Cooper,	2	–	–	Labourer,	13	2	3
Clothes Dealer,	6	1	–	Merchant,	–	–	1

Occupation of Parents of Pupils on School-Rolls, week ending 18th November, 1854—*continued.*

Occupation.	Boys.	Girls.	Infants.	Occupation.	Boys.	Girls.	Infants.
Miller,	–	4	–	Soapmaker,	–	1	–
Publican,	5	–	–	Steward,	5	1	–
Medical Doctor,	2	–	2	Slater,	1	–	1
Policeman,	–	1	2	Tobacconist,	4	–	–
Pensioner,	2	–	1	Tinman,	2	–	1
Pawnbroker,	2	–	1	Tailor,	4	1	4
Poor Scholar,	1	–	–	Teacher,	1	–	1
Private,	2	–	–	Turnkey,	–	–	3
Relieving Officer,	1	1	1	Victualler,	–	–	1
Shop-keeper,	3	17	5	Woodranger,	1	1	2
Shoemaker,	1	2	–	Watchman,	1	–	–
Sawyer,	–	–	1	Workhouse Officer,	2	–	–
Servant,	2	3	4	Weaver,	1	–	1
Saddler,	–	–	1				

4.

Return of School Fees Received in Clonmel Model School, for the year 1854.

Months.	Boys.			Girls.			Infants.			Total		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
January,	3	10	6	1	7	2	0	14	8	5	12	4
February,	5	4	10	1	11	1	0	12	5	7	8	4
March,	4	13	2	0	13	3	0	16	3	6	2	8
April,	2	6	2	1	11	2	1	4	8	5	2	0
May,	5	15	7	1	16	10	1	2	3	8	14	8
June,	4	0	4	4	1	2	1	1	3	9	2	9
July,	3	17	2	1	7	10	0	19	0	6	4	0
August,	2	14	0	1	7	9	0	6	10	4	8	7
September,	4	11	0	2	19	6	1	2	7	8	13	1
October,	4	0	1	2	7	4	1	5	8	7	13	1
November,	4	4	0	1	14	6	1	1	4	6	19	10
December,	2	15	4	2	5	1	1	5	3	6	5	8
Total for the year,	47	12	2	23	2	8	11	12	2	82	7	0

5.

Return of School Requisites Sold during the year.

Months.	Boys.			Girls.			Infants.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
January,	0	14	10	0	10	8	0	1	9½	1	7	3½
February,	0	10	11	0	5	7	0	1	3½	0	17	9½
March,	0	13	10½	0	5	2½	0	1	1	1	0	2
April,	3	19	5½	1	10	6½	0	4	8½	5	14	8½
May,	1	1	9	1	0	3	0	0	10	2	2	10
June,	1	8	7½	0	16	4	0	0	8	2	0	7½
July,	3	1	3½	0	15	8½	0	2	9½	3	19	9½
August,	0	2	8½	0	9	10½	0	0	3	0	12	10
September,	1	11	2½	0	19	1½	0	0	4½	2	10	8½
October,	0	18	8	0	8	5	0	1	9	1	8	10
November,	1	10	3	0	3	10½	0	1	4	1	15	5½
December,	2	16	1½	0	7	9½	0	1	6½	3	5	5½
Total for year,	18	4	8½	7	13	4½	0	18	5	26	16	6

6.

DESTINATION of Nine PUPIL-TEACHERS who left CLONMEL MODEL SCHOOL during the year 1854.

No.	Pupil-Teacher.	Date of Leaving.	Subsequent and Present Occupation.
1	Henry Wall, . .	29th April, 1854,	National School, Lismore.
2	William Birney, .	20th May, 1854,	Went to Gormanstown Agricultural School, as a pupil on farm.
3	Francis Earley, .	20th May, 1854,	Appointed Assistant to Dr. Clarke.
4	Lowry Cunningham,	3rd June, 1854,	Went to his brother, Agriculturist on Munster Model Farm, Cork.
5	Cornelius Molony, .	27th July, 1854,	Appointed Assistant Master in Endowed School, Clonmel.
6	Thomas Mooney, .	29th July, 1854,	Resigned, to go to business.
7	Michael Donovan, .	23rd Oct., 1854,	Appointed to Garrygogue National School, under Lord Bessborough, Co. Kilkenny.
8	Robert Chawner, .	21st Nov. 1854,	Resigned in consequence of close work; went to business.
9	John Murphy, .	5th Dec., 1854,	Appointed to Knocktopher National School.

JOINT REPORT for the year 1854, upon the ANNUAL PUBLIC EXAMINATION of the PUPILS of the CLONMEL DISTRICT MODEL NATIONAL SCHOOL, by TIMOTHY SHEAHAN, Esq., A.M., Head Inspector, and EUGENE A. CONWELL, Esq., District Inspector.

Clonmel, February, 1855.

GENTLEMEN,—The Annual Public Examinations of the pupils attending the Clonmel District Model School, were held on the 16th and 17th November last. The children on the Rolls for the week ending 18th November, 1854, were classified as follows :—

	Boys.	Girls.	Infants.
Learning the First Book of Lessons, .	–	–	52
,, Second ,, . . .	26	16	7
,, Sequel to Second Book of Lessons,	50	33	7
,, Third Book of Lessons, . .	32	21	–
,, Fourth do. . .	10	7	–
,, Fifth do. . .	3	2	–
,, Biographical Sketches of the British Poets, and Selections from their Writings, . . .	13	30	–
,, Sullivan's Literary Class-Book, .	13	30	–
,, the Elements of Grammar, .	76	49	66
,, Parsing and Syntax, . .	45	30	–
,, Descriptive Geography, . .	76	49	66
,, Mathematical & Physical Geography,	45	30	–
,, Arithmetical Tables, . .	121	79	66
,, Simple Rules of Arithmetic, .	26	28	66
,, Compound do. . .	50	21	–
,, Proportion and above, . .	45	30	–
,, Mental Arithmetic, . .	121	79	66
,, Book-keeping, . . .	23	–	–
,, Mensuration, ...	30	–	–
,, Geometry, ...	30	–	–
,, Algebra, ...	30	–	–
,, Easy Lessons on Reasoning, .	13	–	–
,, Physical and Applied Science, .	13	–	–
,, Sacred Poetry, ...	76	49	66
Writing on slates, ...	–	–	31
,, paper, ...	121	79	23
,, from dictation, . . .	95	72	9

Appendix G.

I. Reports on District Model Schools.

Clonmel.

	Boys.	Girls.	Infants.
Hullah's Vocal Music,	60	79	66
Drawing,	60	51	–
Plain sewing, &c.,	–	53	–
Knitting,	–	14	–
Crochet and fancy work,	–	12	–

Preliminary Examination by the Inspectors.—Appended to this Report are programmes, drawn up by the Teachers respectively, setting forth the various subjects on which they had prepared the children for examination in each school. With these programmes before us we held preliminary private examinations, to ascertain the extent of each pupil's attainments in the several subjects taught in each class, and recorded at the time the quality of each child's answering on each subject. These examinations occupied from five to six hours daily, on the 7th, 8th, 9th, 10th, 11th, 13th, 14th, and 15th November; and from the notes then taken, we are able to give the following synoptical view of the proficiency in each School.

Infants' Department.—This School was very skilfully conducted by Miss Emma J. Kempe, up to the month of August last, when she resigned from ill health. Miss Ellen J. Denniston, was then appointed, and under her judicious and zealous management the School has since increased both in numbers and efficiency.

Number of pupils examined, and number who answered satisfactorily:

No. examined.		No.	Proportion per cent.
40	Able to read monosyllables with promptitude,	26	65·0
40	,, spell the monosyllables, occurring in the reading lessons,	33	82·5
40	,, explain do.	35	87·5
6	,, read fairly, and explain lessons occurring in Second Book,	6	100·0
5	,, do. Sequel No. I. to II.	5	100·0
51	,, distinguish the noun, verb, and adjective,	40	76·5
51	,, answer general questions on Maps of World and Ireland,	40	76·5
25	,, answer well on Tables of Time, Weight, Measure, &c.,	14	56·0
14	,, work easy exercises in simple Rules of Arithmetic,	12	85·7
13	,, write a large hand fairly on paper,	10	76·9

Girls' Department.—Miss E. Connolly, the Teacher of this School, resigned in March last. From 1st April to 1st December it was conducted with great ability, judgment, and success by Miss Marianne Doyle, who has since been transferred, at her own request, to the Inchicore Railway Model School. Miss M. A. Jones, late Teacher of Anchorsbower Female National School, has been in charge since 1st December, and gives hopeful promise of keeping up the high character of this School.

Number of pupils examined, and number who answered satisfactorily:

No. examined.		No.	Proportion per cent.
42	Able to read the Second Book or Sequel, with tolerable accuracy,	19	45·2
42	,, ,, ease and correctness,	20	47·6
28	,, Third and higher Books with ease and intelligence,	24	85·7
42	,, distinguish the Parts of Speech,	20	47·6
28	,, parse and apply the rules of Syntax,	25	89·3
28	,, write a sentence from dictation with tolerable accuracy,	9	32·2
28	,, ,, readiness and correctness,	10	35·7
70	,, write fairly,	45	64·3

APPENDIX G.

I. Reports on District Model Schools.

Clonmel.

No. examined.		No.	Proportion per cent.
70	Able to write a good hand with ease and neatness of execution, ...	21	30·0
42	,, trace Blank Maps, and answer fairly on Local Geography, ...	32	76·2
28	,, answer satisfactorily on Mathematical and Physical Geography, ...	16	57·2
42	,, write from dictation and solve pretty correctly questions in Simple Rules of Arithmetic, ...	17	40·5
28	,, solve with readiness questions in Proportion, Practice, and Commercial Arithmetic,	12	42·9
70	,, answer readily in first ten rules of Mental Arithmetic, ...	36	51·4
70	Possessing a respectable knowledge of the Spelling-Book Superseded, ...	23	32·9
28	,, ,, Natural History,	16	57·2
28	Fairly acquainted with sketches of Ancient, Modern, and English History, . . .	24	85·7

Boys' Department.—Mr. Terence Smyth has been in charge, and still continues to conduct it with his usual ability and success. The present talented and skilful Assistant-Teacher, Mr. Joseph Boyd, is the third who has acted in that capacity during the past year. Mr. Mahon removed to the Waterford Commercial National School in February. Mr. Prentice was transferred to Dunmanway District Model School, to act in a similar capacity in August; and Mr. Boyd's appointment dates from 1st September.

Number of pupils examined, and number who answered satisfactorily:

No. examined.		No.	Proportion per cent.
63	Able to read the Second Book or Sequel, with tolerable accuracy, ...	33	52·4
63	,, ,, ease and correctness,	18	28·6
43	,, Third and higher Books with ease and intelligence, ...	14	32·3
63	,, distinguish the Parts of Speech, . .	34	54·0
43	,, parse and apply the rules of Syntax, .	21	48·8
63	,, trace Blank Maps and answer fairly on Local Geography, ...	45	71·4
43	,, answer satisfactorily on Mathematical and Physical Geography, ...	29	67·5
43	,, write a sentence from dictation with tolerable accuracy, ...	10	23·2
43	,, ,, readiness and correctness,	30	69·8
106	,, write fairly, ...	51	48·1
106	,, write a good hand with ease and neatness of execution, ...	31	29·2
63	,, write from dictation and solve pretty correctly, questions in the Simple Rules of Arithmetic, ...	21	33·3
43	,, ,, and solve with readiness exercises in Proportion, Practice and Commercial Arithmetic, . . .	33	76·7
106	,, answer readily in the first ten rules of Mental Arithmetic, ...	35	33·0
106	Possessing a respectable knowledge of the Spelling-Book Superseded, ...	32	30·2
53	,, ,, Natural History,	22	41·5
53	Fairly acquainted with sketches of Ancient, Modern, and English History, . .	39	73·6
27	,, Mensuration of Plane Superficies,	21	77·7
27	,, of first four sets of Book-keeping,	19	70·4
43	,, Easy Lessons on Money Matters,	25	58·1
12	,, ,, Reasoning, (8 Lessons)	7	58·3
27	Able to demonstrate either the whole or portions of the First and Second Books of Euclid,	20	74·1
12	,, solve Simple Equations, ...	3	25·0

The foregoing tables of proficiency cannot but be considered satisfactory, so far as they relate to the subjects ordinarily taught in well organized and well conducted National Schools. Thanks, however, to the great zeal and indefatigable industry of the late Inspector of this District, Edward S. Clarke, Esq., M.D., M.R.I.A., an education has been superadded of a higher order, for the advantage of the two senior classes in the Boys' School, and the Pupil-Teachers in training. They are taught to observe, reflect upon, and draw conclusions from, the homely phenomena that surround them every hour. They are not only made familiar with all that is contained in their daily reading books, which after twelve or thirteen years of age, the pupils will probably read no more; but, by means of Dr. Clarke's admirably practical lessons, they have mastered the elementary principles of the physical and applied sciences, and acquired a power to read the noble and inexhaustible book which will be spread before them while they live. Very considerable progress, too, has been made in these subjects, and a slovenly and careless inaccuracy has anxiously been guarded against, as we are well aware that no attempt at, or even success in, extra branches can at all compensate for deficiency in the ordinary subjects of elementary instruction. In point of fact, we have observed that the commencement of a new branch of study affords a stimulus for enlarged information in the subjects previously taught—so much so, that it seems an axiom, the more extras there may be taught in a School, the more there will be learnt of ordinary things.

Being fully aware, from having been frequently present at Dr. Clarke's lectures, of the great pains he had taken, not only with the pupils, but also to prepare the Teachers to continue this instruction, when he should proceed to some of the other Model Schools already established, for the purpose of introducing a similar course of study there, we asked him to draw up a prospectus of the extent to which he thought the boys of Fourth and Fifth Classes were prepared to be examined practically on these subjects, which we embodied in the following notification to the friends of the pupils and the public generally, issued previously to holding the public examinations:—

Public Examination by the Teachers.—Besides a much greater number of the friends and relatives of the pupils than could be accommodated, owing to the too limited extent of the schoolrooms, we observed present Colonel Phipps, J.P.; Mrs. Phipps and party; Percy Gough, Esq., J.P.; Dr. Phelan, J.P.; John Luther, Esq., J.P., and Mrs. Luther; John Hackett, Esq., J.P., and Mrs. Hackett; W. L. Hackett, Esq., Barrister; Mrs. Mandeville, Castle Anner; Mrs. Riall and party, Annaville; the Misses Malcolmson, and several ladies belonging to the Society of Friends; William Malcolmson, Esq., Portlaw; Rev. John Baldwin, P.P.; Rev. P. Meany; Rev. D. Crotty; Rev. W. Shanahan; Rev. M. Murphy; Rev. James Orr and Mrs. Orr; Rev. John Dill; Joseph Clibborn, Esq.; Benjamin Grubb, Esq.; Joshua Grubb, Esq.; Dr. Scully; Wilson Kennedy, Esq.; Isaac M'Lochlin, Esq.; &c., &c.

FIRST DAY.

The Infants' School was first examined by its highly intelligent Teacher, Miss Denniston, on Reading, Grammar, Geography, Mental Arithmetic, and Natural History; and by one of the Monitresses, Miss Anthony, in a series of arithmetical exercises on the Arithmeticon, or Ball-frame. Nothing could be more satisfactory, nor did any thing appear to give more pleasure to the visitors, than the ready and intelligent answering of the pupils of this interesting School, and the cheerful and tasteful manner in which they sang several appropriate airs.

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In the Girls' School the pupils in Second Book of Lessons and Sequel No I. were examined by one of the Monitresses, Miss Jane E. Orr, on Mental Arithmetic and the Map of Ireland.—Class Sequel No. II., and First Division of Third Class, by Miss M. M. Clarke, on Reading, Subject of Lesson, Principles of Spelling, Map of Europe, and Historical Sketch of Great Britain and Ireland.—Second Division of Third Class by Miss E. Groves, in Selections from the British Poets, Vol. I., Map of Palestine, and Scripture History.

A few airs, selected from Hullah's Manual, were then sung, with a precision, accuracy of time, and beauty of effect, that elicited the warm approbation of all present. The boys of the Fourth and Fifth Classes were then brought in, and examined for an hour by Dr. Clarke, and his Assistant, Mr. Francis Earely, on subjects selected by the public from the preceding programme. The Head Mistress, Miss Doyle, next examined the girls of the Fourth and Fifth Classes in Selections from the British Poets, Vol. II., Mental Arithmetic, Writing from Dictation, and Arithmetical Calculations on slates. The last hour was occupied by Dr. Clarke and his Assistant in examining the pupils of the Senior Classes in the Boys' School on Applied Science.

SECOND DAY.

The entire day was devoted to the examination of the pupils of the Boys' School. T. Fitzgerald, Pupil-Teacher, examined Class Sequel No. II. in Reading, Explanation of Words, and Subject of Lesson. P. Hennessy, the Senior Class, on Natural History, Arithmetical Tables, and the Elementary Rules of Arithmetic. The Third Class was examined by J. Murphy in the Reading Book (page 132, &c.), the Productions of the various Countries, and Scripture History; by D. Foley on Arithmetic, and the Historical Sketch of Great Britain and Ireland, as given in Dr. Sullivan's Introduction to Geography and History. The Fourth and Fifth Classes were examined by Mr. Boyd, Assistant Teacher, in Mensuration, Geometry, and Algebra; by Mr. Smyth, Head Master, in Book-keeping, Reasoning, and Literary Class-Book.

In order that the public and friends of the pupils might have an opportunity, under the various heads set down in the foregoing prospectus, of selecting any subject there named upon which they might desire to hear the pupils examined, the visitors were requested by Dr. Clarke, on both days, to mention any of the subjects in the list; upon which being done, that subject was taken up, and the pupils examined either by Dr. Clarke or Mr. Smyth. This fact of leaving to the public the selection of the subjects for examination bore strong evidence of the amount of confidence Dr. Clarke placed in the industry and acquirements of the pupils whom he had instructed. Nor was he disappointed—as was proved by the perfect ease with which they treated abstruse questions; the self-possession with which they described the working of the steam-engine, the machinery of the electric telegraph; and the correctness with which they tested various mineral ores, and treated of their nature, and the manner in which the processes of Chemistry might be employed to discover their uses and impurities. The examination on the History of Electricity, the several parts of the electric machine, the origin and improvements in Galvanism, the leading principles of Agricultural Chemistry, Mechanics, Optics, Geology, Physiology, and Comparative Anatomy, appeared to afford surprise and satisfaction to all present.

At the conclusion of the examination the successful candidates for

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honours were called forward individually by the Head Inspector, and Mrs. Phipps presented to each a certificate of merit, of which the following is a copy:—

CLONMEL DISTRICT MODEL NATIONAL SCHOOL.

The Commissioners of National Education have awarded a Premium of rank to for distinguished answering in Class, at a Public Examination held in these Schools on day of , 185 , by the Head Inspector and the Inspector of the District.

——————— *Head Inspector.*
——————— *District Inspector.*

The rank of the premium was determined from the collective answering, and adjudged in the order of aggregate merit—the first rank in each class being given to the pupil who obtained, at the preliminary examinations, the greatest number of good marks on all the subjects taught, making due allowance for length and punctuality of attendance, as well as good conduct for the past year. The second rank was assigned to the pupil having the next highest number of good marks, &c.; and the number of premiums in each class was regulated by the number of pupils constituting that class.

A few days after the examinations we distributed among those who had gained certificates of merit the £15 granted by the Commissioners for premiums, according to the following list. With these sums the pupils have bought books, &c., selected by their parents respectively, in which they inserted the certificate signed by us.

CLONMEL DISTRICT MODEL NATIONAL SCHOOL.

17th November, 1854.

At the Private Examinations, held by the Head Inspector and the Inspector of the District, the following Pupils have been returned as deserving of Premiums for distinguished answering in their respective classes:—

INFANT DEPARTMENT.

First Class—First Draft.

	Premium.
Patrick Carroll, .	First Rank.
Mary Bradford, .	,,
Margaret Cooney, .	,,
William Whyte, .	,,
Samuel Legge, .	Second Rank.
Mary Callaghan, .	,,
Joseph Halley, .	,,
Johanna Cooney, .	,,
Patrick Callaghan,	Third Rank.
John Dogherty, .	,,

Second Draft.

Robert Milne, .	First Rank.
Alexander Milne, .	Second Rank.
Michael Halley, .	Third Rank.
James Luther, .	,,
Kate Meehan, .	,,

Third Draft.

Rose Casey, .	First Rank.
Rebecca Graham, .	Second Rank.

Second Class.

Anne Carroll, .	First Rank.
Grace Orr, . .	Second Rank.

Sequel No. 1.

Anne Daly, . .	First Rank.
Mary Carey, . .	Second Rank.

FEMALE DEPARTMENT.

Second Class—Second Division.

	Premium.
Mary A. Lawler .	First Rank.
Julia Murphy .	Second Rank.

First Division.

Johanna Dwyer, .	First Rank.
Anne Nash, . .	Second Rank.

Sequel No. 1.

Mary Guiton .	First Rank.
Jane O'Connell, .	Second Rank.
Anna Legge, .	Third Rank.

Sequel No. 2.

Adelaide Clarke .	First Rank.
Kate Ward, . .	Second Rank.
Margaret Pope, .	Third Rank.
Hannah Mercer, .	,,

Third Class—Second Division.

Anne Meagher .	First Rank.
Ellen Mason, .	Second Rank.
Joyse Wilkinson, .	Third Rank.

First Division.

Kate Bradford .	First Rank.
Jane Groves, .	Second Rank.
Mary Orr, . .	Third Rank.
Ellen Ward, . .	,,

Fourth and Fifth Classes.

	Premium.
Arabella Manning,	First Rank.
Ellen Lannen,	Second Rank.
Maria Carroll,	Third Rank.
Alice Cuddihy,	„
Mary M'Grath	„

Plain and Fancy Work.

Arabella Manning.
Maria Carroll.
Ellen Ward.
Bridget O'Donnell.
Mary M'Grath.
Hannah Hill.
Honora Butler.

MALE DEPARTMENT.

Second Class—Second Division.

Stephen Ahearne,	First Rank.
Edward Fennessy,	Second Rank.
Michael Butler,	Third Rank.
Patrick Denourty,	„

First Division.

William Molony,	First Rank.
William Dogherty,	Second Rank.
Edward M'Kenna,	Third Rank.

Sequel No. 1.

Wm. Prendergast,	First Rank.
Thomas Fahy,	Second Rank.
John Burke,	Third Rank.

Sequel No. 2—Third Division.

Thomas Flynn,	First Rank.
William White,	Second Rank.
William Flynn,	Third Rank.

Second Division.

Thomas Harrigan,	First Rank.
David Orr,	Second Rank.

First Division.

	Premium.
Charles Quinn,	First Rank.
Richard Costin,	Second Rank.
Richard Casey,	Third Rank.
Patrick Burke,	„

Third Class—Second Division.

Morgan Jones,	First Rank.
Daniel Leader,	Second Rank.
Patrick Halley,	Third Rank.
Thomas Cooney,	„
William Murphy,	„

First Division.

William Hickey,	First Rank.
John Carroll,	Second Rank.
Robert Slattery,	Third Rank.
Andrew Milne,	„
Michael Maher,	„
James Pallisier,	„
Edward Dorney,	„

Fourth Class.

John Harrigan,	First Rank.
George Berney,	Second Rank.
Robert Orr,	„
Francis Jennings,	Third Rank.
John Flynn,	„

Fifth Class.

Patrick Carroll,	First Rank.
Frederick Quinn,	„
George Bradford,	„

Physical and Applied Sciences

Frederick Quinn,	First Rank.
Patrick Carroll,	„
George Bradford,	Second Rank.
John Harrigan,	„
Francis Jennings,	„
Adam Orr,	„
George Berney,	Third Rank.
John Flynn,	„
Robert Orr,	„

In addition to the foregoing premiums, Dr. Clarke gave £1, to be distributed to the following pupils:—to P. Carroll, F. Quinn, G. Bradford, J. Harrigan, F. Jennings, G. Berney, J. Flynn; and presented to Adam Orr Stöckhardt's Principles of Chemistry; to Robert Orr, Agassiz and Gould's Comparative Physiology.

Several pieces of vocal music were sung on both days, by a select class of the best voices from the boys' and girls' schools; and at the conclusion of the distribution of the certificates of merit, the National Anthem was sung in the most impressive manner by the pupils of the three Schools—boys, girls, and infants; after which those present formed themselves into a public meeting, when the following resolutions were proposed, and unanimously adopted.

We beg to submit them as deserving the early attention and favourable consideration of the Board—more particularly as the educational wants of the people of Clonmel here referred to, and the enlargement of the establishment, have long since been brought under the notice of the Commissioners, in the past Annual Reports on this School.

JAMES J. SHEE, Esq., Coroner, in the Chair.

Proposed by Rev. John Baldwin, P.P., and seconded by Mr. Samuel Bradford:—

"Resolved—That we, the parents of the pupils and the friends of this Institution, have witnessed with great satisfaction the excellent answering at the public examinations, and have much pleasure in bearing testimony to the high efficiency of the Clonmel Model Schools."

Proposed by William Malcomson, Esq., Portlaw, and seconded by Joseph Clibborn, Esq., Clonmel:—

"Resolved—That we beg most respectfully to represent to the Commissioners of National Education, through their officers now present, the urgent necessity that exists for increased school-room accommodation, and especially for a hall or lecture room suited for such public examinations."

Proposed by Mr. Thomas Dorney, Honorary Secretary to the Mechanics' Institute, Clonmel, and seconded by Rev. James Orr:—

"Resolved—That, while we beg to express our thanks to the officers generally for their great urbanity and attention to the interests of this Institution, we feel called on especially to record our deep obligations to Dr. Clarke, for his untiring zeal and energy in imparting the most useful, scientific, and practical information, and so successfully that he has established a study of the physical and applied sciences as a permanent branch of school education."

Proposed by Rev. John Dill, and seconded by Mr. John Harrigan:—

"Resolved—That in order to complete the efficiency and extend the utility of such schools, we most earnestly pray the Commissioners to supply the want so much felt by the public, by adding Classics to their course of instruction; and thus make their system worthy of its name, and yet more to be conducive to the interests of the nation."

Sir Robert Kane, F.R.S., M.R.I.A., President of Queen's College, Cork, in the first number of "The Journal of Industrial Progress"—in the opening article—"ON THE USES OF INDUSTRIAL EXHIBITIONS:—*The Great Industrial Exhibition of* 1853, *and its influence upon the Development of Industry in Ireland*"—makes allusion to this School in the following terms:—

"The progress of industry in Ireland will be found specially facilitated by the admirable training which the young people of the labouring and artizan class are now receiving in the primary National Schools. This education, it must be recollected, is not by any means confined to reading, writing, and arithmetic, but embraces by the lesson-books, and otherwise, the elements of natural philosophy and physical science, general notions of political economy, and other subjects of practical interest, together with (in the higher schools) the elements of drawing, of agriculture, and (for females) of embroidery. To this nothing exists equal in Great Britain, and scarcely in Europe; and, moreover, in what are called the Model Schools, originally intended as model primary schools, but which have become really secondary schools of a very high class—as, for instance, in Clonmel—the instruction given furnishes the sons of the middle class with the best and most practical education that can be had anywhere for a mercantile career, when the parents do not propose putting the boy through a complete university course."

To this Report are appended Tables showing the occupation of the pupils at each of the Schools, and the courses of study appointed for the Pupil-Teachers and Paid-Monitresses, together with the dietary of the former.

We have the honour to remain, Gentlemen, your obedient servants,

TIMOTHY SHEAHAN, Head Inspector,
EUGENE A. CONWELL, District Inspector.

The Secretaries,
Education Office.

APPENDIX G.

I. Reports on District Model Schools.

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PROGRAMME of SUBJECTS upon which the PUPILS of the BOYS' SCHOOL have been prepared to be examined.

Second Class.—Lowest Division, lately removed from First Book. Reading: first eight Lessons in Second Book. Spelling: the words occurring in Lessons. Grammar: an attempt to distinguish the article, noun, and verb. Geography: outlines of Map of the World. Arithmetic: to six times in Multiplication Table; a little of the useful Tables, viz.:—Time, Money, Avoirdupois Weight, and Measure of Capacity; to add up easy sums on black board—not able to make figures or work yet on slates. Writing: all at the merest elements of writing; write on paper.

N.B.—The children of this class are only prepared for a very easy examination on the above subjects.

Second Class (2nd Division).—Reading: to tenth Lesson in Section 2nd of Second Book. Spelling: the words occurring in Lessons. Grammar: article, noun, adjective, and verb, parts of speech as they occur in Lessons. Geography: Outlines of Map of World. Arithmetic: Notation and Numeration to millions' place. Simple Addition (easy exercises); Multiplication Tables; Tables of Time, Money, Avoirdupois Weight, Capacity. Writing: all write large-hand—a few commenced in round-hand

Class Sequel No. 1, lately removed from Second Book—Reading: Lesson Book to page 44, first six Lessons. Spelling: Words of Lessons, and first ten columns in First Part, Spelling Book Superseded. Grammar: the parts of Speech, as they occur in Lessons. Geography: Map of World, Natural Divisions, &c. Arithmetic: easy exercises in Addition, Subtraction, and Multiplication; easy sums in Short Division (Division to five times); commenced doing a little in Addition of Money. Tables: same as Second Class. Writing: all write round-hand on paper, and make a good attempt at copying from Lesson Book on slates.

Class Sequel No. 2 (*Lowest Division*).—Reading: to page 63. Spelling: words in Lessons, and First Part of Spelling Book Superseded. Grammar: Parts of Speech of words in Lessons. Geography: World, Europe, Africa, Ireland. Arithmetic: Simple Rules, Addition and Subtraction of Money; commenced Compound Multiplication. Tables: same as 2nd Sequel No. 1 Classes, but better prepared. Writing: all write a good round small-hand.

Class Sequel No. 2 (*Second Division*).—Reading: to page 55. Spelling: words as they occur in Lessons. First part of Spelling Book Superseded. Grammar: the whole of the parts of speech, and to page 47 in Sullivan's Grammar (large type). Geography: the World, Europe, Ireland. *Text* of Geography to Europe—a *little* of the British Islands and of Palestine. Arithmetic: Simple Rules, and to Compound Multiplication in Compound Rules. Tables: they know most of the tables in small book. Writing: all write small-hand on paper, and write from dictation the lessons they read. Zoology: Patterson's sheets, "Vertebrated Animals." History: nearly all know fairly the historical sketch of Great Britain and Ireland.

Class Sequel (*Highest Division*).—Reading: any portion of Sequel. Spelling: words of Lessons and First and Second Parts of Spelling Book Superseded. Grammar: all the parts of speech, and to page 60 in Sullivan's Grammar, large text, (know small text nearly to page 40). Geography: same as first Division, but know details much better. Geography of British Islands. &c. Arithmetic: all Simple and Compound Rules; are beginning easy exercises in Simple Proportion.

Writing: all write small-hand on paper, and sentences from dictation from Reading Lessons. History: Historical Sketch of Great Britain and Ireland. Zoology: The Sheets (Patterson's) Nos. 1 and 2 "Vertebrated" and "Invertebrated animals."

Class Third Book (*Lowest Division*).—Reading:—Third Book to page 200. Spelling: First, Second, and Third Parts of Spelling-Book, and Rules for Spelling. Grammar: can parse easy sentences out of the reading Lessons, and know text of Grammar (Sullivan's) to end of verb. Geography: Maps of World, Europe, Asia, Africa, America, England, Ireland, Scotland, Palestine, Outlines of Ancient World. Arithmetic: Simple Proportion and Fractions. Writing: all write small-hand on paper. History: Historical Sketch of British Islands, and a little of outline of Ancient History. Zoology: Patterson's Sheets. Physiology: Diagrams on circulation, digestion, &c.

Class Third Book, (*Highest Division*).—Reading: any portion of Third Book. Spelling: First Four Parts of Spelling Book Superseded; Rules for Spelling; prefixes, affixes, and roots of most of words in Lessons. Grammar: can parse with Syntax, and know to end of verb in text of Grammar (Sullivan's). Geography; same as Lower Division. Arithmetic; Simple and Compound Proportion, Fractions, Practice, and Tare and Tret. Mensuration: easy rules in Plane Superficies. Writing: all write small-hand. History: same as Lower Division. Zoology: same as Lower Division. Physiology: Ditto.

Class Fourth and Fifth Books.—Reading: any portion of Fourth Book—and in Fifth Book the subjects of Mechanics, Astronomy, Optics, Physiology, Literary Class Book, and most of the Lessons. Grammar: to parse most of the Lessons they have read over; most of the text in Sullivan's Grammar; Figures of Rhetoric, Orthography, and Syntax. Spelling: the greater part of Spelling Book; Latin and Greek roots, prefixes, affixes, Rules for Spelling, &c. Geography: same as Third Book Classes. Arithmetic: nearly the whole of Thompson's Arithmetic. Algebra: Simple and Quadratic Equations. Mensuration: Plane Superficies. Euclid: nearly all know First and Second Books. Reasoning: First eight Lessons. Geography Generalized: first eight Chapters. History: Outlines of Ancient and Modern History. Zoology: Patterson's Sheets. Physiology: the whole of diagrams. Natural Philosophy: Geology, series of superposition; Steam Engine, &c. &c.; Chemistry. Book-keeping: first five sets by boys of Fifth Book. Fourth Book, some one set, some second and third sets.

TERENCE SMYTH, Teacher of Boys' School.
JOSEPH BOYD, Assistant-Teacher.

PROGRAMME of the SUBJECTS upon which the PUPILS of the GIRLS' SCHOOL are prepared to be examined.

Second Class (*Lowest Division*).—Reading: Second Book; Section first, and explanation of each lesson. Spelling: any words occurring in the Lesson. Grammar: To distinguish the article, noun, verb, and adjective. Geography: Outlines of the Map of World. Arithmetic: Notation and Numeration to six places of digits, and to work easy sums in Addition. Tables: Money, Time, Avoirdupois Weight, and Measure of Capacity. Writing: all write large-hand on paper.

Second Class (*Highest Division.*)—Reading: First, Second, and Third Sections of Second Book, and explanation of each Lesson. Spelling: Part First of Spelling Book Superseded. Grammar: to distinguish all the parts of speech. Geography: Maps of the World, Europe, and Ireland. Arithmetic: Notation and numeration to billions; Simple Addition and Subtraction; to add and subtract mentally, and solve questions in the first and second rules of Mental Arithmetic. Tables: Multiplication Table to twelve times, Tables of Money, Time, Avoirdupois Weight, Long Measure, Cloth Measure, and Measure of Capacity. Writing: all write small-hand on paper, and from dictation, the names of the days of the week, months of the year, and difficult words occurring in the lessons.

Class Sequel No. 1.—Reading: Lesson Book to page 67, and explanation of each lesson. Spelling: Part First of Spelling Book Superseded. Grammar: can refer words to the parts of speech, tell the number and person of nouns and pronouns, and compare adjectives. Geography: Maps of the World, Europe, and Ireland. Arithmetic: can work exercises in Addition, Subtraction, and Multiplication, are just commencing Division, and know three rules of Mental Arithmetic. Tables: same as Second Class. Writing: all write small-hand on paper, and can write from dictation an easy sentence from Lesson Book.

Class Sequel No. 2.—Reading: Lesson Book to page 110, and explanation of each lesson. Spelling: Spelling Book Superseded; First and Second parts of "Verbal Distinctions," and three rules for spelling, with the exceptions. Grammar: have learned the large text in Board's Grammar to page 80, and can parse sentences Etymologically. Geography: Maps of the World, Europe, Ireland, and America, and are familiar with the names of the circles on the Map of the World. Arithmetic: the Simple Rules (with the exception of Long Division) and easy exercises in Compound Addition and Subtraction, three rules of Mental Arithmetic, and all the Tables. Writing: small-hand on paper, and from dictation, sentences from any of the Lessons.

Third Class (Lowest Division).—Reading: Lesson Book to page 55, and explanation of each Lesson; prefixes, roots, and affixes as they occur in the Lessons. Spelling: Spelling Book Superseded, "Verbal Distinctions" to page 74, and four rules for spelling, with their accompanying exercises and exceptions. Grammar: Sullivan's Grammar to page 45, and to parse sentences Etymologically. Geography: Maps of the World, Europe, Ireland, and America, and two chapters of the Geography Generalized. History: Historical Sketch of Great Britain and Ireland, as given in the "Introduction to Geography and History." Arithmetic: Compound Rules, Reduction, and easy exercises in Simple Proportion, and five rules of Mental Arithmetic. Writing: to write any sentence dictated from the Third Book.

Third Class (Highest Division).—Reading: Lesson on Natural History, Scripture History and Descriptive Geography; also some pieces from Vol. II. of "Selections from the British Poets;" prefixes, roots, and affixes, as they occur in the Lessons. Spelling: Spelling Book Superseded, "Verbal Distinctions," and can spell and tell the meaning of the words given in the first nine columns of the "Difficult Words;" points out the exemplifications of, and exceptions to, all the Rules for Spelling, as they are met in the Lessons. Grammar: can parse sentences Syntactically, and know Sullivan's Grammar to page 59. Geography: Maps of the World, Europe, Ireland, America, Asia, and Palestine, and four chapters of the Geography Generalized. History: same as Lowest Division. Arithmetic: Compound Rules, Reduction and Simple Proportion; and nine rules of Mental Arithmetic. Writing: to write from dictation any poem or lesson from Third Book.

Fourth and Fifth Classes.—Reading: the whole of Lesson Book, and have commenced to read the Literary Class Book, and Selections from the British Poets, Vol. I. and II. Acquainted with the Greek, Latin, and Saxon prefixes, roots, and affixes, as they occur in the Lessons, and are acquainted with the most important lessons in the Finchley Manual, No. III. of Household Work. Spelling: all the Spelling Book Superseded, except the rules for Orthoepy. Grammar: are acquainted with the whole of Sullivan's Grammar; can parse the poetical pieces in Fourth Book, and are familiar with the figures of speech. Geography: the first six chapters of the Geography Generalized; Maps of the Continents and British Islands, Ancient and Sacred Geography. History: Historical Sketch of Great Britain and Ireland, and part of the Ancient History, from the "Introduction to Geography and History." Arithmetic: Proportion (Simple and Compound), Practice, Fractions, and twelve rules of Mental Arithmetic. Writing: to write from dictation a poem or lesson from any of the books.

MARIANNE DOYLE, Teacher of Girls' School.

INFANT DEPARTMENT.

PROGRAMME OF SUBJECTS TAUGHT IN CLASSES.

First Book (1*st Draft*).—Reading: First Section of First Book of Lessons. Spelling: all the words that occur in the lessons. Grammar: can distinguish nouns. Geography: Divisions of Land and Water. Arithmetic: Addition, with Arithmeticon.

Second Draft.—Reading: Second Section of First Book of Lessons: Spelling: any difficult words in the Lessons. Grammar: can point out articles and nouns. Geography: Outlines of the Map of the World; chief cities and countries of Europe. Arithmetic: commencing Addition on slates. Writing: large-hand on slates.

Third Draft.—Reading: Third Section of First Book of Lessons. Spelling: all the words in the Lessons. Grammar: can distinguish articles, nouns, and verbs, as they occur in the Lessons. Geography: Maps of the World and Europe. Arithmetic: can write down three places in the period of digits; simple exercises in Addition and commencing Subtraction mentally. Tables: Time and Cloth Measure. Writing: on slates and on paper.

Second Book.—Reading: any Lesson to page 29. Spelling: all words in the Lessons of one or more syllables. Explanation: well acquainted with the subjects of the Lessons. Grammar: able to point out articles, nouns, verbs, and adjectives. Geography: Maps of the World, Europe, and Ireland. Natural History: an elementary knowledge of the Animal Kingdom. Tables: Avoirdupois weight, Time, Measure of Capacity, and as far as five times in Multiplication and Pence Tables. Arithmetic: Notation and Numeration to hundreds of thousands. Addition, Subtraction and Multiplication, mentally and on slates. Writing: on slates and on paper.

Sequel No. 1.—Reading: all the Lessons to page 57. Spelling: four columns of Spelling Book Superseded. Part First, and difficult words in the Lessons. Explanation: are familiar with the subject of each lesson. Grammar: can distinguish all the parts of speech. Geography: Maps of the World, Europe, and Ireland. Natural History: can tell the different classes of Vertebrate and Invertebrate Animals. Tables: Avoirdupois weight, Time, Measure of Capacity, and as far as nine times in Multiplication and Pence Tables. Arithmetic: First Rule of Mental Arithmetic; Notation and Numeration to billions; Addition,

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Subtraction, Multiplication and Division, mentally and on slates. Writing: on slates and on paper.

Gallery Lessons.—Any of the following subjects:—"The Whale," "The Crocodile," "The Tortoise," "The Cow," "The Lion," "The Camel," "The Ostrich," "The different classes of Vertebrate and Invertebrate Animals;" Descriptive Geography, as "The Three Kingdoms in Nature," "The Seasons," "The Solar System;" "Song of the Trades," "The Seed," "Denominations of Land and Water, &c.," "Geometrical Lines," "Object Lessons," "Ball Frame."

Pieces for Singing.—"What are the wild waves saying?" "Hours of Happy Childhood," "Happy Home," "Sister, awake," "The Mineral Kingdom," "The Lark," "Manual Exercises."

ELLEN J. DENNISTON.
Teacher of Infants' School.

TIME TABLE OF CLONMEL DISTRICT MODEL SCHOOL.

BOYS' DEPARTMENT.

General instruction begins at 10½ o'clock, and ends at 3 o'clock, on the following days:—Monday, Tuesday, Wednesday, and Thursday. On Friday general instruction begins at 11 o'clock, and ends at 3 o'clock. On Saturday general instruction begins at 10 o'clock, and ends at 12 o'clock.

OCCUPATION OF SCHOOL TIME.

MONDAY.

Time.	1st Book.	2nd Book.	Sequel.	3rd Book.	4th & 5th Books.
10½ to 11	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.	Writing.	Writing.
11 to 11½	Reading.	Reading.	Reading.	Geography.	Geography.
11½ to 12	Writing.	Writing.	Writing.	Lessons prepared at home.	Lessons prepared at home.
12 to 12½	Geography.	Geography.	Geography.	Arithmetic.	Arithmetic.
12½ to 1	15m. Writing. 15m. Reading.	15m. Dictation. 15m. Reading.	15m. Dictation. 15m. Reading.	Do.	Do.
1 to 1½	Play.	Play.	Play.	Play.	Play.
1½ to 2	Arithmetic.	Arithmetic.	Arithmetic.	Reading Selections from British Poets or Literary Class Book.	
2 to 2½	Do. & Tables.	Do. & Tables.	Do. & Tables.	Drawing.	Drawing.
2½ to 3	Reading and Grammar.	Reading and Grammar.	Reading and Grammar.	Do.	Do.
3 to 4	Drawing for Pupil Teachers and Select Class.				

TUESDAY.

10½ to 11	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.	Writing.	Writing.
11 to 11½	Reading.	Reading.	Reading.	Lessons prepared at home.	Lessons prepared at home.

Occupation of School Time—*continued.*

Tuesday—*continued.*

Time.	1st Book.	2nd Book.	Sequel.	3rd Book.	4th & 5th Books.
11½ to 12	Writing.	Writing.	Writing.	Arithmetic.	Algebra.
12 to 12½	Geography.	Geography.	Geography.	Do.	Do.
12½ to 1	15m. Writing. 15m. Reading.	15m. Dictation. 15m. Reading.	15m. Dictation. 15m. Reading.	Dictation.	Dictation.
1 to 1½	Play.	Play.	Play.	Play.	Play.
1½ to 2	Arithmetic.	Arithmetic.	Arithmetic.	Reading.	Subjects of 4th and 5th Books, and Physical and Applied Science.
2 to 2½	Do. & Tables.	Do. & Tables.	Do. & Tables.	Do. & Grammar.	
2½ to 3	Reading, &c.	Reading, &c.	Reading, &c.	Singing.	Singing.
3 to 4	Drawing for Pupil Teachers and Select Class.				

Wednesday.

Time.	1st Book.	2nd Book.	Sequel.	3rd Book.	4th & 5th Books.
10½ to 11	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.	Writing.	Writing.
11 to 11½	Reading.	Reading.	Reading.	Geography.	Geography.
11½ to 12	Writing.	Writing.	Writing.	Lessons prepared at home.	Lessons prepared at home.
12 to 12½	Geography.	Geography.	Geography.	Arithmetic.	Arithmetic.
12½ to 1	15m. Writing. 15m. Reading.	15m. Dictation. 15m. Grammar.	15m. Dictation. 15m. Grammar.	Do.	Do.
1 to 1½	Play.	Play.	Play.	Play.	Play.
1½ to 2	Arithmetic.	Arithmetic.	Arithmetic.	Reading Selections from British Poets and Literary Class Book.	
2 to 2½	Do. & Tables.	Do. & Tables.	Do. & Tables.	Drawing.	Drawing.
2½ to 3	Reading, &c. General Lesson and Dismissed.	Reading, &c.	Reading, &c.	Do.	Do.
3 to 4	Drawing for Pupil Teachers and Select Class.				

Thursday.

Time.	1st Book.	2nd Book.	Sequel.	3rd Book.	4th & 5th Books.
10½ to 11	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.	Writing.	Writing.
11 to 11½	Reading.	Reading.	Reading.	Lessons prepared at home.	Lessons prepared at home.
11½ to 12	Writing.	Writing.	Writing.	Arithmetic.	Algebra.
12 to 12½	Geography.	Geography.	Geography.	Do.	Do.
12½ to 1	15m. Dictation. 15m. Reading.	15m. Dictation. 15m. Reading.	15m. Dictation. 15m. Reading.	Dictation.	Dictation.
1 to 1½	Play.	Play.	Play.	Play.	Play.

Occupation of School Time—*continued.*

Thursday—*continued.*

Time.	1st Book.	2nd Book.	Sequel.	3rd Book.	4th & 5th Books.
1½ to 2	Arithmetic.	Arithmetic.	Arithmetic.	Reading and Grammar.	Physical and Applied Sciences, and 4th and 5th Books.
2 to 2½	Do. & Tables.	Do. & Tables.	Do. & Tables.		
2½ to 3	Reading.	Reading, &c.	Reading, &c.	Singing.	Singing.
3 to 4	Drawing for Pupil Teachers and Select Class.				
Friday.					
11 to 11½	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.	Writing.	Writing.
11½ to 12	Reading.	Reading.	Reading.	Geography and lessons prepared at home.	Geography and lessons prepared at home.
12 to 12½	Writing.	Writing.	Writing.	Arithmetic.	Arithmetic.
12½ to 1	15m. Dictation. 15m. Reading.	15m. Dictation. 15m. Reading	15m. Dictation. 15m. Reading.	Do.	Do.
1 to 1½	Play.	Play.	Play.	Play.	Play.
1½ to 2	Arithmetic.	Arithmetic.	Arithmetic.	Reading.	Reading in 4th & 5th Books.
2 to 2½	Do. & Tables.	Do. & Tables.	Do. & Tables.	Drawing.	Drawing.
2½ to 3	Reading, &c.	Reading, &c.	Reading, &c.	Do.	Do.
3 to 4	Drawing for Pupil Teachers and Select Class.				
Saturday.					
10 to 10½	Repetition of week's lessons.	Repetition of week's lessons.	Repetition of week's lessons.	Writing.	Writing.
10½ to 11	Reading, &c.	Reading, &c.	Reading, &c.	Repetition of week's lessons.	Repetition of week's lessons.
11 to 11½	Writing.	Writing.	Writing.	Geography and Globes.	Geography and Globes.
11½ to 12	Mental Arithmetic.	Mental Arithmetic.	Mental Arithmetic.	Mental Arithmetic.	Mental Arithmetic.
12 to 1	-	-	-	-	Physical & Applied Sciences, Diagrams, and Experiments, &c.

Religious Instruction from 10 to 10½ o'clock on Monday, Tuesday, Wednesday, and Thursday, and from 10 to 11 o'clock on Friday.

Vacations.—One week at Easter, three weeks at Midsummer, and one week at Christmas.

Rates of Payment.—5*s.*, 2*s.* 6*d.*, and 1*s.* 1*d.* per quarter. All rates to be paid in advance.

Names of Teachers.—Terence Smyth, Teacher of Boys' School; Joseph Boyd, Assistant Teacher.

APPENDIX G.

I. Reports on District Model Schools.

Clonmel.

GIRLS' DEPARTMENT.

General instruction begins at 10½ o'clock, and ends at 3 o'clock, on the following days:—Monday, Tuesday, Wednesday, and Thursday. On Friday general instruction begins at 11 o'clock, and ends at 3 o'clock. On Saturday general instruction begins at 10 o'clock, and ends at 12 o'clock.

OCCUPATION OF SCHOOL TIME.

MONDAY.

Time.	2nd Book.	Sequel.	3rd Book.	4th Book.	5th Book.
10½ to 11	Writing on Paper.	Writing on Paper.	Arithmetic.	Arithmetic.	Arithmetic.
11 to 11½	Arithmetic.	Arithmetic.	Writing on Paper.	Dictation.	Dictation.
11½ to 12	Lessons prepared at home.	Lessons prepared at home.	Dictation.	Writing on Paper.	Writing on Paper.
12 to 12½	Play.	Play.	Play.	Play.	Play.
12½ to 1	Geography.	Geography.	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.
1 to 1½	Reading.	Reading.	Geography.	Geography.	Geography.
1½ to 2	Grammar.	Grammar.	Reading.	Reading.	Reading.
2 to 2½	Needle-work.	Needle-work.	Needle-work.	Needle-work.	Needle-work.
2½ to 3	Do.	Do.	Do.	Do.	Do.
3 to 4	Drawing for Paid Monitresses and Select Class.				

TUESDAY.

Time.	2nd Book.	Sequel.	3rd Book.	4th Book.	5th Book.
10½ to 11	Writing on Paper.	Writing on Paper.	Arithmetic.	Arithmetic.	Arithmetic.
11 to 11½	Arithmetic.	Arithmetic.	Writing on Paper.	Mental Arithmetic.	Mental Arithmetic.
11½ to 12	Lessons prepared at home.	Lessons prepared at home.	Mental Arithmetic.	Writing on Paper.	Writing on Paper.
12 to 12½	Play.	Play.	Play.	Play.	Play.
12½ to 1	Geography.	Geography.	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.
1 to 1½	Dictation.	Dictation.	Grammar.	Parsing.	Parsing.
1½ to 2	Reading.	Reading.	Geography.	Reading.	Reading.
2 to 2½	Drawing.	Drawing.	Drawing.	Drawing.	Drawing.
2½ to 3	Do.	Do.	Do.	Do.	Do.
3 to 4	Drawing for Paid Monitresses and Select Class.				

WEDNESDAY.

Time.	2nd Book.	Sequel.	3rd Book.	4th Book.	5th Book.
10½ to 11	Writing on Paper.	Writing on Paper.	Arithmetic.	Arithmetic.	Arithmetic.
11 to 11½	Arithmetic.	Arithmetic.	Writing on Paper.	Dictation.	Dictation.

APPENDIX G.

I. Reports on District Model Schools.

Clonmel.

OCCUPATION OF SCHOOL TIME—*continued.*

WEDNESDAY—*continued.*

Time.	2nd Book.	Sequel.	3rd Book.	4th Book.	5th Book.
11½ to 12	Lessons prepared at home.	Lessons prepared at home.	Dictation.	Writing on Paper.	Writing on Paper.
12 to 12½	Play.	Play.	Play.	Play.	Play.
12½ to 1	Geography.	Geography.	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.
1 to 1½	Reading.	Reading.	Geography.	Geography.	Geography.
1½ to 2	Mental Arithmetic.	Mental Arithmetic.	Reading.	Reading.	Reading.
2 to 2½	Needle-work.	Needle-work.	Needle-work.	Needle-work.	Needle work.
2½ to 3	Singing.	Singing.	Singing.	Singing.	Singing.
3 to 4	Drawing for Paid Monitresses and Select Class.				
THURSDAY.					
10½ to 11	Writing on Paper.	Writing on Paper.	Arithmetic.	Arithmetic.	Arithmetic.
11 to 11½	Arithmetic.	Arithmetic.	Writing on Paper.	Mental Arithmetic.	Mental Arithmetic.
11½ to 12	Lessons prepared at home.	Lessons prepared at home.	Mental Arithmetic.	Writing on Paper.	Writing on Paper.
12 to 12½	Play.	Play.	Play.	Play.	Play.
12½ to 1	Geography.	Geography.	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.
1 to 1½	Dictation.	Dictation.	Parsing.	Parsing.	Parsing.
1½ to 2	Reading.	Reading.	Geography.	Reading.	Reading.
2 to 2½	Drawing.	Drawing.	Drawing.	Drawing.	Drawing.
2½ to 3	Do.	Do.	Do.	Do.	Do.
3 to 4	Drawing for Paid Monitresses and Select Class.				
FRIDAY.					
11 to 11½	Arithmetic.	Arithmetic.	Arithmetic.	Dictation.	Dictation.
11½ to 12	Lessons prepared at home.	Lessons prepared at home.	Dictation.	Writing on Paper.	Writing on Paper.
12 to 12½	Play.	Play.	Play.	Play.	Play.
12½ to 1	Geography.	Geography.	Lessons prepared at home.	Lessons prepared at home.	Lessons prepared at home.
1 to 1½	Reading.	Reading.	Geography.	Geography.	Geography.
1½ to 2	Grammar.	Grammar.	Reading.	Reading.	Reading.
2 to 2½	Needle-work.	Needle-work.	Needle-work.	Needle-work.	Needle-work.
2½ to 3	Singing.	Singing.	Singing.	Singing.	Singing.
3 to 4	Drawing for Paid Monitresses and Select Class.				

OCCUPATION OF SCHOOL TIME—*continued.*

SATURDAY.

Time.	2nd Book.	Sequel.	3rd Book.	4th Book.	5th Book.
10 to 10½	Repetition of week's lessons.	Repetition of week's lessons.	Repetition of week's lessons.	Repetition of week's lessons.	Repetition of week's lessons.
10½ to 11	Do.	Do.	Do.	Do.	Do.
11 to 11½	Reading.	Reading.	Mental Arithmetic.	Mental Arithmetic.	Mental Arithmetic.
11½ to 12	Grammar.	Grammar.	Dictation.	Dictation.	Dictation.

Religious Instruction from 10 to 10½ o'clock on Monday, Tuesday, Wednesday, and Thursday, and from 10 to 11 o'clock on Friday.

Vacations.—One week at Easter, three weeks at Midsummer, and one week at Christmas.

Rates of Payment.—5*s.*, 2*s.* 6*d.*, and 1*s.* 1*d.* per quarter. All rates to be paid in advance.

Name of Teacher.—Mary A. Jones, Teacher of Girls' School.

INFANTS' DEPARTMENT.

General instruction begins at 10½ o'clock, and ends at 3 o'clock, on the following days:—Monday, Tuesday, Wednesday, and Thursday. On Friday general instruction begins at 11 o'clock and ends at 3 o'clock. On Saturday general instruction begins at 10 o'clock, and ends at 12 o'clock.

OCCUPATION OF SCHOOL TIME.

Time.	1st Class—1st Division.	1st Class—2nd Division.	2nd Class.	Sequel.
10½ to 11	Calling Rolls and Singing Hymns.			
11 to 11½	Reading and Spelling.	Reading and Spelling.	Writing on Slates.	Writing on Slates.
11½ to 12	Arithmetic.	Writing on Slates.	Spelling and Reading.	Spelling and Reading.
12 to 12½	Recreation in Playground.			
12½ to 1	Geography and Poetry.	Arithmetic.	Arithmetic.	Arithmetic.
1 to 1½	Reading & Natural History.	Geography and Grammar.	Geography and Grammar.	Geography and Grammar.
1½ to 2	Play.	Play.	Writing on Paper.	Writing on Paper.
2 to 3	Simultaneous Lessons in Gallery.			

Religious Instruction from 10 to 10½ o'clock on Monday, Tuesday, Wednesday, and Thursday, and from 10 to 11 o'clock on Friday.

Vacations.—One week at Easter, three weeks in Midsummer, and one week at Christmas.

Rates of Payment.—5*s.*, 2*s.* 6*d.*, and 1*s.* 1*d.* per quarter. All rates payable in advance.

Name of Teacher.—Ellen J. Denniston, Teacher of Infants' School.

Appendix G.

I. Reports on District Model Schools.

Clonmel.

Dietary for Resident Pupil Teachers.

Days.	Breakfast.	Dinner.	Supper.
Sunday,	*Tea, with bread and butter.	*Beef and soup.	*Tea, with bread and butter.
Monday,	*Bread and milk.	*Corned beef & cabbage.	Stirabout and new milk.
Tuesday,	*Bread and milk.	*Corned beef & cabbage.	Stirabout and new milk.
Wednesday,	*Bread and milk.	Fish.†	Stirabout and new milk.
Thursday,	*Bread and milk.	*Beef and soup.	Stirabout and new milk.
Friday,	*Bread and milk.	Fish.	Stirabout and new milk.
Saturday,	*Bread and milk.	Fish.	Stirabout and new milk.

Programme of Morning Course of Study for Resident Pupil Teachers.

Days.	From half-past 6 to half-past 7 o'clock, A.M.	From half-past 7 to half-past 8 o'clock, A.M.	Taught by
Monday,	Arithmetic.	Algebra.	Mr. Boyd, Assistant Master.
Tuesday,	Geometry.	Trigonometry.	Ditto.
Wednesday,	Bookkeeping.	Bookkeeping.	Ditto.
Thursday,	Mensuration.	Practical Geometry, Mapping, &c.	Ditto.
Friday,	Mental Arithmetic.	Algebra.	Ditto.
Saturday,	Geometry.	Trigonometry.	Ditto.

Programme of Evening Course of Study for Resident Pupil Teachers.

Days.	From 6 to 7 o'clock, P.M.	From 7 to 8 o'clock, P.M.	From 8 to 9 o'clock, P.M.	Taught by
Monday,	Spelling-Book Superseded.	Affixes, Prefixes, Derivations.	Writing Exercises.	Mr. Smith, Head Master.
Tuesday,	Geography.	History.	Easy Lessons on Reasoning.	Ditto.
Wednesday,	When the weather is favourable, walk out with Head or Assistant Master, or practise Surveying with the chain. When the weather is unfavourable, private study, or solution of difficulties arising in private study of Pupil Teachers.			Ditto.
Thursday,	Physical and Applied Sciences.	Physical and Applied Sciences.	Physical and Applied Sciences.	Ditto.
Friday,	Biographical Sketches of British Poets, and Selections from their Writings.	Young's Manual.	Dawes' "Suggestive Hints."	Ditto.
Saturday,	Lesson Books.	Grammar and Parsing.	Easy Lessons on Money Matters.	Ditto.

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* Beef, 1 lb.; bread, 1 lb.; soup, 1 pint; new milk, 1 pint; tea, 1 pint.

† In case fish cannot be procured, eggs, butter, and milk to be substituted.

Programme of Course of Study for Paid Monitresses.

Days.	From 9 o'clock to 9½ o'clock, A.M.	Taught by
Monday,	YOUNG'S Manual—DAWES' "Suggestive Hints"—SULLIVAN'S Literary Class Book—Prefixes, Roots, and Affixes.	Miss Denniston.
Tuesday,	ARITHMETIC—Theoretical, Practical, and Mental.	Miss Jones.
Wednesday,	Spelling Book Superseded—Biographical Sketches of the British Poets, and Selections from their Writings.	Miss Denniston.
Thursday,	GEOGRAPHY—Descriptive, Physical, and Mathematical.	Miss Jones.
Friday,	Lesson Books, and Natural History.	Miss Denniston.
Saturday,	Grammar. English Composition from 12 to 1 o'clock.	Miss Jones.

II.—HEAD INSPECTORS' REPORTS upon SCHOOLS Inspected, and TEACHERS Examined, during the year 1854.

II. Head Inspectors' Reports on Schools Inspected and Teachers Examined.

Dr. Newell.

No. 1.—GENERAL REPORT of W. H. NEWELL, Esq., LL.D., Head Inspector, upon Schools Inspected, and Teachers Examined, during the year 1854.

GENTLEMEN,

I have to submit to you, for the information of the Commissioners of National Education, my General Report for the year 1854.

The following statement of the occupation of my time is merely a summary of what I have already put forward in my weekly journals. I was employed—

	Days.
Preparing and correcting Examination Papers,	21
Holding public Examinations of Teachers,	57
Business of Dunmanway District Model School,	22
Holding Special Inquiries,	13
Attending Central Office,	11
Attending House of Lords,	7
Visiting schools in England,	11
Writing General Report,	6
Correspondence and incidental business,	69
Inspecting National Schools,	90
Sick,	1
Holidays,	4
Sundays,	53
	365

As I anticipated in my Report for last year, I was enabled to devote more time in the year just closed than 1853 to the inspection of Ordinary National Schools. My labours extended over the same school districts, but were differently distributed. I travelled (not including my travelling in England) 4,028 miles, at a cost of £65 6*s.* 10*d.* for locomotive expenses, or somewhat more than 3⅞*d.* per mile; being a halfpenny per mile higher than the mileage of last year.

The immediate subjects of this Report are the results of my visit to 104 National Schools, and the examination and classification of ninety-eight male and 215 female Teachers.

SECTION I.

During the year 1854, I visited and transmitted Reports upon 151 Ordinary National Schools; but of these twenty-two were inoperative, and in twenty-one I did not, from want of time, examine the classes fully or at all. The Cork Poor Law Union National School and three Agricultural Model Schools, being schools of a special character, will not be referred to in this Report; it will refer only to 104 of the National Schools which I found in operation, and inspected in detail.

State of Houses.—Of the 104 schools—

46	were held in good houses,
25	,, ,, fair ,,
12	,, ,, middling
21	,, ,, unfit ,,
Total, . . 104	

The entire amount of accommodation would give for each child present nearly seven square feet, which is slightly above the area required by the rules of the Board.

In many of the rural schools, and in some of those in towns, there was a great want of cleanliness and order, while the ventilation was imperfect, or the means at command to secure it neglected by the Teachers. This neglect was more common in male than in female schools. There is such a general want of any thing like arrangement about the cottages of the poorer classes, even when domestic circumstances admit of it, and so much of the social discomfort in the Irish peasant's life is attributable to a total disregard of order and cleanliness, while ventilation is a thing never thought of, it is to be regretted that the National Teacher does not, both by precept and example, try to remove these abuses. Cleanliness is so nearly akin to high moral qualities, and pure air is so necessary to physical health, that the Teacher who neglects to inculcate the advantages of both fails in one of the most important duties of his office.

Fittings-up.—In nearly every one of the vested schools the furniture was fully adequate to the wants of the children. I found the furniture in thirty-eight cases *good*, in forty-three *fair*, and in twenty-three *bad*. Many of the school-houses belonged to the teachers themselves, who were unable to procure suitable furniture; and in other cases the Managers were either apathetic or unwilling to furnish houses of which their tenancy is so insecure. I found thirty-eight schools without black boards, while in some of those that had black boards, the use of them, as material helps to instruction, was too often neglected. Maps of the World, Europe, and Ireland, are to be found in most of the schools, and about one-third of those inspected had almost a complete set of large maps. In too many of the schools there was a want of Class-Books and requisites, for which the Managers are, for the most part, accountable.

Attendance of Pupils.—

Total number present, ...	4,714
Total daily average for twelve months previous to inspection, ...	5,296

It thus appears that there were nearly six more in average attendance at each of the 104 schools than were present on the day of my inspection. In 1853 there were three more present in each school than in average daily attendance. I can only explain this opposite state of things by the circumstance that in 1853 I did not commence inspecting schools until after the 15th March, while I had, in 1854, seen thirty-four schools previous to same date, in every one of which I found the number present far below the average daily attendance, owing to the severity of the weather, and a variety of other causes. Only in thirty-five schools were the numbers present above the average daily attendance.

The school accounts are generally better kept, although I observed much carelessness on this head among the younger teachers. In one or two cases only had I reason to believe the records untrue.

There is no improvement in the attendance, as regards *regularity*; it is still very unsatisfactory in this respect. The absences amount fully to forty-five per cent. on the number on the rolls, which is a state of things that need not exist. It does not arise from any necessity, but is the offspring of the apathy, carelessness, or ignorance of the parents. In the city of Boston "the absences do not amount to ten per cent. in most of the schools;" while in Ireland, where there is so much less excuse—at least on the ground of early employment—the absences average four and a-half times as high. The "Truant Laws"* of America contribute, in some degree, to secure a regular attendance of scholars; and it would be, in my opinion, highly advantageous to society if there were similar laws for all the cities and large towns in Ireland, where hundreds of boys and girls are to be seen who never attend any school, and whose "*home education*" consists in witnessing scenes that should never meet the eye, and hearing language that should never reach the ear, of childhood.

I do believe that the condition of these young persons is a great social evil, and one that calls loudly for legislative interference.

Proficiency of Pupils.—The results of my examination of the pupils were, on the whole, less satisfactory than those given in my Report for 1853. There were a few Schools of each class fully as good as any inspected in 1853; but the great majority of the pupils were not so well prepared. Forty-three of the Schools were conducted by Third Class Teachers, and twenty-four by Probationers—a much larger proportion

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* *Act of* 1850, *chapter* 294, *sect.* 1. Each of the several cities and towns in this Commonwealth is authorized and empowered to make all needful provisions and arrangements concerning habitual truants, and children not attending school, without any regular and lawful occupation, growing up in ignorance, between the ages of six and fifteen years; and also all such ordinances and by-laws respecting such children as shall be deemed most conducive to their welfare and the good order of such city or town; and there shall be annexed to such ordinances suitable penalties, not exceeding, for any one breach, a fine of twenty dollars: *provided*, that such ordinances and by-laws shall be approved by the Court of Common Pleas for the county, and shall not be repugnant to the laws of the Commonwealth.

Sect. 2. The several cities and towns availing themselves of the provisions of this act shall appoint, at the annual meeting of said towns, or annually by the mayor and aldermen of said cities, three or more persons, who alone shall be authorized to make the complaints, in every case of violation of said ordinances or by-laws, to the justice of the peace or other judicial officer, who, by said ordinances, shall have jurisdiction in the matter, which persons, thus appointed, shall alone have authority to carry into execution the judgments of said justices of the peace or other judicial officer

Act of 1852, *chapter* 283, *sect.* 1. Any minor between the ages of six and fifteen years, convicted under the provisions of an act entitled "An Act concerning Truant Children and Absentees from School," passed in the year one thousand eight hundred and fifty, of being an habitual truant, or of not attending school, or of being without any regular and lawful occupation, or growing up in ignorance, may, at the discretion of the justice of the peace or judicial officer having jurisdiction of the case, instead of the fine mentioned in the first section of said act, be committed to any such institution of instruction, house of reformation, or suitable situation, as may be provided for the purpose under the authority given in said first section, for such time as such justice or judicial officer may determine, not exceeding one year.—*Statutes of the Commonwealth of America*

APPENDIX G.

II. Head Inspectors' Reports on Schools Inspected and Teachers Examined.

Dr. Newell.

of these classes of Schools than I inspected in 1853. The 104 principal teachers were classified as follows:—

TEACHERS. Male.	TEACHERS. Female.	Class.
13	11	Probationers.
30	13	Third Class.
17	5	Second Class.
7	8	First Class.
67	37	
Total, 104		

Besides the fact that I inspected a larger number of schools conducted by a lower grade of teachers, I visited more remote and more neglected portions of my circuit, in which National Education has but recently been introduced. Further, seventeen of the schools were not more than twelve months in connexion, and some not half this period. A few I visited specially, having received information from the District Inspectors that they were in an unsatisfactory state. However, with active local management, I have no doubt the schools would exhibit very different results. Without it the District Inspectors' visits are too few and far between to secure the efficient working of a school, unless conducted by a painstaking teacher. It is necessary, too, that quick official action should be taken on reports of an unfavourable character, in order to give effect to the inspection. Some teachers do not value the suggestions of an Inspector, when his views are not promptly and energetically supported by the executive.

The following table sets forth the classification of the pupils, as made out by the teachers in my presence—

Reading First Book of Lessons,	1,619	
,, Second ,,	1,996	
,, Third ,,	716	
,, Fourth ,,	313	
,, Fifth ,,	70	—4,714
Learning Grammar,	2,062	
,, Geography,	2,750	
,, Arithmetic—First Four Rules,	1,447	
,, ,, Compound Rules,	400	
,, ,, Proportion, and above,	497	
,, Writing on Slates,	907	
,, Writing on Paper,	1,929	
,, Geometry,	83	
,, Algebra,	24	
,, Book-keeping,	21	

Annexed is a table showing the result of my examination of the classes—*

Able to read Second Book correctly,	877 or 18·6	per cent.
Able to read the higher Books with ease and intelligence,	581 or 12·3	,,
Acquainted with Parts of Speech,	244 or 5·1	,,
Able to Parse,	266 or 5·6	,,
Able to write a sentence with tolerable accuracy,	177 or 3·9	,,
Able to write a sentence with ease and freedom,	119 or 2·5	,,

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* The numbers under each head in this table are independent, save in arithmetic, *e.g.*; 266, the number able to parse, does not include 244, the number acquainted with the parts of speech.

Acquainted with Map of World, . . .	479 or	10·1 per cent.
,, ,, with Europe and Ireland,	219 or	4·6 ,,
,, with General Course of Geography,	47 or	1·0 ,,
Able to write down figures to 9 places, . .	493 or	10·5 ,,
Able to work a sum in Subtraction readily, .	879 or	18·6 ,,
Able to work Practice, ...	208 or	4·4 ,,
Able to write fairly, ...	400 or	8·5 ,,
Able to write with ease and freedom, . .	127 or	2·7 ,,

There are two branches still very much neglected in nearly all the schools, Writing and Dictation. There is no excuse for the careless and wretched penmanship that so generally prevails. Dictation is a branch that has only latterly engaged the attention of teachers in the south, and it is one that is imperfectly taught in other* countries as well as in Ireland. In very few National Schools can the pupils of the Fourth Class write correctly from dictation a passage of common-place English; many of the words would be found spelled† as the boys themselves are in the habit of pronouncing them. The teachers generally display very little skill in their method of giving instruction in this branch; the consequence is, that the letters of emigrants, who have been educated at National Schools, and of small farmers and shopkeepers throughout the country, are literary‡ curiosities.

SECTION II.

This year the examination for male teachers was *special*, so that only probationers and candidates seeking promotion, or teachers summoned for special purposes were present.

There were in attendance from the seven districts connected with me ninety-eight male teachers, of whom thirty-two were candidates for promotion, two were summoned for special reasons, and sixty-four were probationers. Of the last, twenty-nine were promoted each one step, and nine, two steps; five were dismissed, and twenty-one still remain probationers. There were twenty-two probationers absent; of these—

7	were absent on satisfactory grounds.
6	unsatisfactory.
7	dismissed on written exercises.
1	enlisted.
1	dismissed for declining to attend the examinations.
Total, . 22	

Of the other thirty-four teachers—

13	were promoted.
2	depressed.
19	not altered in their classification.
Total, . 34	

Besides these thirty-four, there were twenty-five teachers who sought promotion, and attended the written examinations in Easter

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* "The remark I feel it needful to repeat. English composition is the weakest point in most schools."—*Rev. F. C. Cook's General Report for* 1853.

† "I found out, after a while, that my pupils wanted first to be taught speaking, and this led me to commence with *pronunciation*."—*Pestalozzi.*

‡ The following is a copy of a note received by one of the District Inspectors from an hotelkeeper *not* educated at a National School—

"Sir,—I have to sertify that your man were verry carefull of your horse he gave him oats and Bran and my charges is one shilling and sixpence for steabling and hea. I remain your most umble servent.

A. B."

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week, but who were not present at the oral examination, for the following reasons:—

18	not summoned, as their written exercises were insufficient.
2	sick.
1	emigrated.
4	schools inefficient.
Total, . 25	

The annexed Table shows the Classification of the ninety-eight Teachers *before* and *after* the Examinations:—

—	P.	III.^{1}	III.^{2}	II.^{2}	II.^{1}	I.^{3}	I.^{2}	I.^{1}	Dismissed.	Total.
Before, .	64	15	7	7	3	–	2	–	–	98
After, .	22	47	12	4	3	3	1	1	5	98

The total amount of travelling expenses was £116 0*s.* 5*d.*, or £1 2*s.* 8*d.* for each teacher.

The next table shows the average number of questions asked of, and answered by, the teachers of each class, and each division of a class.

RESULTS OF EXAMINATIONS.

Class of Teacher.	Oral.			Written.					Remarks.
	Average Number of Questions asked.	Average Number of Questions answered.	Per centage answered.	Number of Questions.	Answered.			Not attempted.	
					Satisfactorily	Imperfectly.	Wrong.		
Probationers, .	68	41·2	60·5	32	17	9·5	2·5	3	The teachers who were promoted answered about one-third more than the average, dismissed teachers not included.
III^2, . .	64	46	71·8	32	13	6	5·7	7·3	
III^1, . .	101	29·4	29·1	49	19	13·2	10·6	6·2	
II^2, . .	101	43	42·5	49	23·4	12·6	6·7	6 3	
First Class, and Candidates for it, . . .	155	83	53·6	51	22·4	14·2	7·6	6·8	

The results of this table, when compared with those for 1853, exhibit a very decided improvement in the teachers' answering. Only in two respects was there a falling off. There was an increase of—

22	per cent.	on the oral examination	for probationers and Third Class.
20	,,	on the written ,,	,,
10	,,	,,	for Second Class.
17	,,	,,	for First Class.

There was a decrease of two per cent. on the oral answering of the second-class teachers, and of 0·7, or not quite one per cent. on that of the first-class teachers. The oral answering of the teachers in the first division of Third Class—who were all examined on the second-class course, being candidates—was not good. None of this division were promoted. The great improvement in the answering of the probationers and teachers in second division of Third Class is partly explained by the fact, that all in the latter were specially prepared for promotion—a remark that applies to all the classed teachers present, save two.

The written examination extended over two days, instead of over one, as heretofore; so that exercises were performed with more care, and the writing with more neatness.

I required each teacher to write from dictation a passage read from some standard English author, to which exercise I added a half-a-dozen difficult words from Sullivan's Spelling-book Superseded. Each class got a different exercise. The first-class teachers wrote a short essay on a given subject; their papers were free from orthographical errors. and the composition was rather creditable. The average number of mistakes in the exercises of the Second Class was 2 5: there was only one exercise of this class in which there was no mistake. The exercises of the probationers and third-class teachers contained, on the average, 3·3 mistakes, while only nine were free from any. I attach a copy of one of the easiest exercises performed by a probationer.

Only in reading did I observe no improvement: very few read satisfactorily, and scarcely any with ease or expression. The bad effects of an early vicious accentuation, and an habitual carelessness when conversing with those about him, render correct reading one of the most difficult tasks the teacher has to encounter. Very few teachers have opportunities of *hearing* good readers or correct speakers.

Female Teachers.—During the year 1854 there was a re-classification of all the Female National Teachers in Ireland. I examined, in all, 215, of these there were—

Promoted, . . .	71
Not changed, . . .	107
Depressed, . . .	30
Dismissed, . . .	7
Total, . .	215

The following Table shows the Classification *before* and *after* the Examinations:—

—	P.	III.^{1}	III.^{2}	II.^{2}	II.^{1}	I.^{3}	I.^{2}	I.^{1}	Dismissed.	Total.
Before, .	64	60	31	23	15	9	11	2	–	215
After, .	40	60	38	29	16	11	12	2	7	215

Of the thirty teachers depressed—

9 were from III^2 to Probationers.
13 ,, III^1 ,, III^2.
3 ,, II^2 ,, III^1.
1 ,, II^1 ,, II^2.
1 ,, I^3 ,, II^1.
1 ,, I^3 ,, II^2.
1 ,, I^1 ,, I^2.
1 ,, I^1 ,, I^3.

Total, . 30

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I beg to annex a tabular statement of the answering at the oral and written examinations.

Class.	Oral.			Written.					Remarks.
	Average Number of Questions asked.	Average Number of Questions answered.	Per centage answered.	Number of Questions.	Satisfactory.	Imperfect.	Wrong.	Not attempted.	
P.,	63	33	52·4	21	6·6	5·3	3·8	5·3	The answering of the seven dismissed teachers is not included.
III^2,	58	31·7	54·6	21	5·3	5·4	4·5	5·8	
III^1,	65	30	46·1	20	8·0	4·2	3·7	4·1	
II^2,	77	28	36·4	20	6·8	4·8	2·6	5·8	
II^1,	94	39	41·5	20	5·7	6·0	3·8	5.5	
I^3,	94	54	57·4	20	7·5	5·0	3·2	4·3	
I^2,	99	53	53·5	20	7·6	6·0	2·8	3·6	
I^1,	101	88·5	87·6	20	13·0	5·0	0·0	2·0	

As in the case of the male teachers, I required each to write an exercise from dictation. These exercises were much better than those of the male teachers. The average number of mistakes committed by the probationers, third and second-class teachers was 2·8, or not quite three. The first-class teachers and candidates had, on the average, only 1·2 mistakes. Twenty of the former classes, and six of the latter had no mistakes. I append a copy of an exercise performed by a probationer, and containing more than the average number of mistakes. History continues to be most imperfectly known by nearly all the teachers; only one male and three female teachers answered well on this subject.

Although the result exhibited by the foregoing table cannot fail to be considered satisfactory, they afford a very imperfect notion of the highly creditable manner in which the female teachers, as a body, acquitted themselves. There were only two districts in which the answering was generally poor, but even in these there were some exceptions. In two other districts—namely, those having the towns of Dunmanway and Killarney for their centres—the answering was, on the contrary, very creditable. An excellent Training School at Dunmanway, and three or four first-class Ordinary National Schools in these districts—advantages not shared by the others—account for the superiority of the teachers.

The appearance and demeanour of nearly every one of the female teachers were such as would do credit to any country. In a few cases only was there an unnecessary—I had almost said an unbecoming—display of dress; but, viewing them as a body of public instructors, considering their past histories as individuals, and their services as agents in the diffusion of knowledge, and in the inculcation of habits to the female portion of the rising generation, their importance cannot be overrated. So far as I could learn or observe, they have, in the vast majority of cases, discharged their duties faithfully, and with profit to the State.

Besides the female teachers examined, there were thirty-four others summoned, from twenty-five of whom satisfactory apologies for their non-attendance were received.

The amount paid for travelling expenses was £112 6*s.* 5*d.*, or, on an average, 10*s.* 6*d.* each, nearly.

The average age at which the female probationers present took charge of National Schools was eighteen years. This age could not be considered objectionable, if the teachers had received previous training at a Model School or a really first-class school. Most women who have an aptitude for teaching are at eighteen years of age *so far* qualified to be entrusted with the care and instruction of children, and with the management of Ordinary National Schools. They have a moral influence that male teachers of the same age seldom possess. The average age of forty-seven *male* probationers in attendance did not much exceed eighteen years, and they could not have been more than seventeen years and two months old at the time of their appointments. I have already respectfully suggested to the Commissioners the desirableness of fixing a minimum age for the admission of teachers into their service. There is a disposition to appoint a class of *boy teachers* in the south of Ireland, who do nothing more than *instruct,* in the narrowest sense of the term. The District Inspectors and myself have succeeded in weeding out most of these. One of the greatest difficulties the schools have to contend with is the want* of properly qualified male candidates. Additional Training Schools and an increased scale of remuneration can alone supply this want. Eligible female candidates are not by any means equally scarce. The unusual demand for men's services, the large majority of women in the population, and the relatively higher scale of payment to female than to male teachers, account for the greater facility in obtaining schoolmistresses. But without *male* teachers the education of the people cannot be effectively carried on. Mixed† schools in charge of female teachers will not educate the male portion of the population. Greater inducements must, therefore, be held out to secure the services of eligible young men. Several of the paid monitors and third-class teachers resigned their situations last year, and are now sergeants in militia regiments. Let some approach to the liberal scale of payment to teachers in England be made in Ireland, and the State will not want properly qualified candidates. The Rev. F. C. Cook says, in his General Report for the year 1853, "The average salaries of all the teachers in schools examined this year, " including sixty-five Infants' and twenty-five Mixed Schools in small " parishes, ranges from £50 to £60 per annum, *irrespective* of allowance " from Government."‡ The Irish National Teachers do not, on the average, receive half this sum; and yet many of them, having left their own country, have taken rank among the first teachers in England, in points of emolument and position.

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* No office is more honourable, none more responsible, and none which needs a greater combination of gifts and graces, than that of a common school teacher. To a well-stored mind should be added a power of imparting instruction; and a life directed by pure morality should shine forth in an unimpeachable example. The influence exerted in the microcosm of a school will be felt even in future generations, long after the teachers, having ended their labours, shall have been gathered to their account. How important, then, that they who have the oversight of this matter should conscientiously attend to their duty, and not entail upon society the curse that has its origin in a school under the charge of an ignorant or immoral teacher.—*Report of Executive Committee on Normal Schools in New York.*

† "My lords will refuse to make grants to a Mixed School, *under a mistress* "*only*, if it is the only school in the village. Such a school is not fit for boys over eight or nine years of age; and my lords could not, in any public measure, recognize such an age for leaving school."—*Minutes of the Committee of Council,* 1853.

‡ The general average salaries for male teachers, without board, was £83 6*s*., being an increase of £4 4*s*. each on those of the preceding year. The average salaries of male teachers, with board, was £62 17*s*., being an advance of £27 11*s*. each on those returned in preceding years. The average salaries of female teachers, without board, was at the rate of £52 12*s*., and with board £32 1*s*.—an advance of £8 5*s*. each on those of preceding years.—*Report on the State of Education in Upper Canada for the year* 1852.

The want of school libraries is very much felt by the teachers and by the most advanced boys. Without access to books besides those on the Commissioners' list the National Teacher cannot acquire any thing like general information. In most parts of Ireland there are no books to be had, except at great inconvenience or expense. There is a population daily growing up, capable and desirous of reading during their leisure hours, possessed of the elements of self-culture without any of the opportunities, and debarred from seeking those very recreations for which the State has at considerable expense qualified them.

In Upper Canada, public school libraries have been established in connexion with the common school system, the principles of which are the same as those of the system of Irish National Education. The youth of all classes of the population "have equal access to the advantages of the schools, the religious faith of all is equally protected, and the interests of all equally consulted."

The prejudices which I referred to in my Report for 1853, as existing among some of the higher and middle classes of society, have not in any respect abated. Circumstances of last year, connected with public education, led some to believe that there would be a modification of the system, but in these instances the wish was truly father to the thought. However, the belief did not advance the interest of education in this country. I still feel that the want of co-operation from the landlord class and the clergy of the Established Church, is a great check to the progress of united education. Nothing but the peculiar adaptation of the present system to the wants of Ireland could have met and triumphed over such opposition. As statesmen of all enlightened countries are admitting the correctness of its principles as a scheme of NATIONAL EDUCATION, one is led to hope, that past opposition will be gradually turned into future support.

I have met not a few who keep aloof from the National Schools from want of faith in a system of education which they say aims at too much, and is calculated to make the people discontented with their position in life. It is to this class that the late Dr. Chalmers, with whose eloquent words I beg to conclude this Report, when defending an enlarged scheme of education for the poor, said—

> "It is not to turn an operative into a capitalist, it is to turn an ignorant operative into a learned operative—to stamp upon him the worth and the respectability of which I contend he is fully susceptible, though he rise not by a single inch above the sphere of life in which he now moves—to transform him into a reflective and accomplished individual: not to hoist, as it were, the great ponderous mass of society up into the air, where it would have no foundation to support it; but supposing that mass to be stationary on it present basis, to diffuse through it the light both of common and of Christian intelligence.
>
> "I repeat it, the main object of pouring a more copious and rich supply of education amongst them, is not to furnish them with the means of abandoning their status, but to furnish them with the means of morally and intellectually exalting it."

I have the honour to be, your very obedient servant,
W. H. NEWELL.

Cork, 1855.

Dictation Exercise.

Patrick ———, Probationer.

The affection felt for him by the Civil Service was singularly ardent and constant. Through all his disasters and perils, his brethern stood by him, with steadfast loyalty. The army loved him, as armies have seldom loved any but the greatest chiefs, who have led them to victory. Even in his disputes with distinguished military men, he could always

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command the services of the soldiers, while such was his influence over the hearts of his countrymen, he enjoined among the natives, an unparalleled popularity. He spoke their vernacular dialect with facility and precision. He was intimately acquainted with their feelings and usages. On one or two occasions he deliberately acted in defiance of their opinion; but by pursuing this course he secured their respect. It is impossible to refuse the highest commendation to a man, who, taken from a leger, to govern an empire, overwhelmed by public business, surrounded by people as busy as himself, and separated by thousands of leagues from almost all society, gave both by his example and his munificence a great impulse to learning.

Catalogue.
Balance.
Campaign.
Grenadier.
Coalesce.
Unwieldy.

Mary ———, Probationer.

Common salt, though found in some countries in a sollid and massive state, is for the most part an artificial preparation from sea water. Scarcely any other production is in so much request. It is used by the inhabitants of nearly all countries for correcting the insipidity of food. When applied in small quantities it accellerates the putrid fermentation, and in this case, it is considered to aid dijestion by promoting the decomposition of the aliments. The most celebrated salt mines are in Poland. On decending to the bottom of these mines a stranger is astonished to find a kind of subterranean republic consisting of many families, who have their own peculiar laws. Here are public roads and carriages, horses being employed to draw the salt to the mouths of the mine, where it is taken up by engines. Many of the people are born there and never stir out, but others have occasional opportunities of breathing the fresh air in the fields and enjoying the light of the sun.

Minature.
Nuisance.
Machinery.
Burial.
Jeopardy.
Dialogue.

GENERAL REMARKS on 104 NATIONAL SCHOOLS inspected by DR. NEWELL, during the year 1854.

NOTE.—Lest the following brief remarks, which are very short abstracts of the reports sent weekly by me to the Office on each school, should lead any one to believe that the schools are really worse than they are, I think it well to observe that the standard by which I tested the pupils' proficiency was very high; but with effective teaching and active management, quite attainable. Unless 50 per cent. of the pupils in the second, third, and fourth classes, answered fairly in every branch taught, and half of these decidedly well, I would not consider a school in a satisfactory state. I applied the same standard to *all* the schools, otherwise it is clear my returns would be of no use in an educational point of view. Every child in every one of these classes in 104 schools was examined by me in each branch, except in one school, at which a few escaped being examined in geography.

The Rathcormac Female National School, and the Kenmare Industrial, are not referred to in my General Report. In the former I did not examine all the classes, and the latter is clearly exceptional as regards literary statistics.

The letter *a*, refers to the state of the School Accounts.
" *b*, " supply of Requisites and Books.
" *c*, " general observance of Board's Rules.

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
CO. CORK.					
1. Brooklodge, .	1854. Jan. 24,	3	26	An untrained teacher. III^1.	Slated house, in bad state of repair; slates off roof, and windows broken; walls dirty and not whitewashed. Room sufficiently commodious, and furnished. As this was the first day after the Christmas vacation the attendance was very small; but, from all I could observe and learn, the parents in this locality are indifferent to the education of their children. No fourth class in the school. The teacher does not appear to have made due exertion to bring about a better state of things. *a*, fair; *b*, bad; *c*, fair.
2. Riverstown, f.	Jan. 26,	19	53·5	Trained teacher. II^1. A paid work-mistress.	Slated house and in repair; desks and forms sufficient, but badly constructed. No black board; tablet lessons stuck up against walls; arrangement of time-table inapplicable to present state of school business. Answering of pupils bad in every particular. There was a want of discipline in the school, and of earnestness in the pupils' manner. A slight attempt has been made to introduce vocal music, but the singing was most discordant. Teacher careless and inefficient. *a*, bad; *b*, fair; *c*, bad.
3. Lisgoold, f.	Jan. 31,	33	44	Trained teacher. I^1.	Slated house, in repair and well kept; school-room fully furnished and very neat; pupils' progress since the appointment of the present teacher satisfactory; but the positive state of their answering was, in many respects, very middling. Discipline and order excellent. Teacher intelligent and skilful. Every thing connected with the school is promising. *a*, good; *b*, fair; *c*, good.
4. Ballymore, mixed,	Feb. 1,	49	65	An untrained probationer.	Thatched house, very unsuitable, and in bad state of repair; furniture bad; classes as badly prepared as any I ever examined. It is, in fact, a *hedge* school in all but in name. N.B.—Since my inspection teacher was dismissed, and school struck off the rolls.
5. Clenore and Carrig, m.	Feb. 2,	31	31	Trained teacher. II^2.	Thatched house and in repair; contains two rooms, one for boys and one for girls; there is a bad clay floor; the furniture is pretty good; but there was a want of arithmetical tablet lessons; time-table badly constructed; junior classes answered very poorly; but there were six boys present in third class rather well prepared; no fourth class. Teacher has been only one month in charge of this school, although under the Board since 1849. *a*, bad; *b*, bad; *c*, very unsatisfactory.

GENERAL REMARKS on 104 NATIONAL SCHOOLS inspected by Dr. NEWELL, during the year 1854.

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. CORK—*con.*					
6. Clenore & Carrig, f.	Feb. 2,	22	26	An untrained probationer.	House described under last head; school-room badly furnished; only one desk with a seat attached and a few short forms; no black board; school has only recently been taken into connexion, and is still without books and the usual apparatus. The girls used previously to receive instruction in the male school; their proficiency was generally very low. The teacher is young and inexperienced, and altogether there is little to be expected. *a*, fair; *b*, very deficient; *c*, fair.
7. Ballyhooley, f.	Feb. 3,	37	72	A trained teacher. I^1. An assistant who is a probationer.	Slated house, well built, and in good state of repair; furniture good; no fourth class present; only the pupils in the third class answered well; the condition of the school, must, under circumstances, be set down as very unsatisfactory. There is an able teacher, with an assistant, but the former has not been even commonly attentive to her business. Time-table badly arranged. The school is handsomely endowed by the Earl of Listowel. Singing used to be taught, but has been given up. *a*, fair; *b* and *c*, good.
8. Tocher, mixed,	Feb. 6,	44	50	An untrained teacher. II^1.	House of a bad description, and out of repair; the approach, too, is objectionable; room badly lighted and furnished; no black board. With the exception of the answering of three pupils in the fourth class, the proficiency was bad; in geography only was the general answering good. The teacher is smart, and for his years experienced, but is evidently not contented with his present situation, which makes him more or less indifferent to the welfare of the school. Arrangement of time-table obscure. Discipline lax. *a*, well kept; *b*, deficient; *c*, good. N.B.—Teacher has since resigned, and joined the special class.
9. Whitechurch, m.	Feb. 7,	35	38	An untrained teacher. III^1.	A slated house of rather imposing appearance, but very badly constructed for school purposes, and in an unfurnished state. The school is liable to be disturbed by noise from the girl's school overhead, as the flooring is not ceiled; roof out of repair; furniture sufficient, but badly arranged; time-table not filled up. The proficiency of the pupils, except in dictation, which had not been practised till lately, was fair; the subjects of pupils' lessons were not carefully explained, so that there was a want of intelligence among the classes. Teacher appears deficient in energy. He is pretty constantly employed in translating Irish manuscripts, which may interfere with his proper vocation of schoolmaster. *a*, fairly kept; *b*, very deficient; *c*, fair.
10. Ditto, f.	Feb. 7,	19	37	An untrained probationer.	School held on second floor of house just described, and conducted by male teacher's wife. There are sufficient desks and forms, but no black board, nor large maps, but these latter are borrowed occasionally from the boys' school. The condition of the classes generally was very unsatisfactory, and the teacher seems unequal to an effective discharge of her duties. However, I saw the school under very unfavourable circumstances. *a*, fair; *b*, very deficient; *c*, fair.
11. Ballintemple, mixed,	Feb. 8,	29	41	An untrained probationer.	School held in a small room, forming portion of a house occupied by a tailor in the village; the room is most unsuitable, and every thing connected with it unsatisfactory. The children in attendance are all very young, and can do little more than read and spell. The teacher is inefficient, and there are no advantages conferred on the locality by this school. *a*, very incorrect, and, I believe, falsified; *b*, deficient; *c*, bad.

GENERAL REMARKS on 104 NATIONAL SCHOOLS inspected by DR. NEWELL during the year 1854.

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. CORK—*con.*					
12. Blackrock, m.	Feb. 9,	54	65	Trained teacher. II¹.	House in repair, but the floor is of a bad description, and the walls very dirty; there is rather too much furniture. The proficiency of the senior classes was creditable, but of the junior quite the contrary. The teacher finds that the attendance is too large to admit of his preparing all the classes well, so he devotes undue attention to the advanced classes. There was a general want of personal cleanliness and of discipline; arrangement of school time very confused. *a*, fair; *b*, fair; *c*, good. N.B.—An assistant teacher has been appointed.
13. Ballyvriskig, mixed,	Feb. 10,	37	42	An untrained probationer.	A good house, and in repair, but walls very damp; fuel scarce, so that there is seldom a fire in the school-room; too many desks and forms; no black board; tablet lessons mouldering away from wetness of walls; school-time badly arranged. Pupils' answering on every subject very discreditable. I doubt if I ever observed such evidences of careless teaching. *a*, badly kept; *b*, deficient; *c*, bad. N.B.—Teacher has since been dismissed from Board's service.
14. Sundays' Well, f.	Feb. 24,	61	92	A trained teacher. I³. An untrained probationer as assistant. A work-mistress.	House in pretty good state of repair; school-room large and commodious, and well furnished, although some of the furniture requires repairs; no black board; reading, writing, and dictation generally well taught, but in other branches the good answering was exceptional; arrangement of school-time bad; order and cleanliness not strictly attended to. The principal teacher is a steady well-informed person, but apparently deficient in energy. In the senior classes it was only the naturally quick girls that were generally well prepared; sufficient labour in teaching did not appear to have been bestowed upon girls not equally gifted. *a*, indifferent; *b*, fair; *c*, rather good.
15. Douglas, m.	Feb. 27,	76	82	An untrained teacher. III¹. An assistant who is a probationer.	Slated house, in repair, but walls not plastered inside; furniture sufficient. Answering of senior classes good on all subjects save dictation, which branch has been only lately introduced; the junior classes were not so well prepared. The teacher struck me as an earnest and useful servant. *a*, fair; *b*, fair; *c*, good.
16. Kilcreddan, mixed,	Feb. 28,	41	55	Trained teacher. I³.	Slated house, and in repair; school-room badly furnished, and worse kept; floor covered with dust, and walls with cobwebs. Every thing about the premises bespoke the grossest inattention; teacher himself the impersonation of disorder and untidiness. Great want of discipline. Writing the only branch fairly taught; in every other subject I found the pupils, with few exceptions, badly prepared. Teacher has a farm, which seems to engross his attention. *a*, bad; *b*, deficient; *c*, very bad. N.B.—Teacher has since been reduced to second class.
17. Vicarstown, f.	Mar. 1,	21	39	Untrained Teacher. III².	School held in an indifferent thatched cabin; furniture only tolerable; no black board. The attendance of the pupils to-day was small, as it was Ash-Wednesday. In no respect could the answering of the classes be considered at all good. The mistress is a person of very limited attainments, and possessing little power as a teacher. There are no inducements for a good teacher to settle in the locality, which is poor and remote. Time-table injudiciously drawn up. *a*, badly kept; *b*, deficient; *c*, fair.

GENERAL REMARKS on 106 NATIONAL SCHOOLS inspected by Dr. NEWELL during the year 1854,

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. CORK—*con.*					
18. Matahea, m.	1854. Mar. 1,	29	39·5	Trained teacher. III^{1}.	This is the boys' school for the locality just described, and is within a few yards of the girls' school, but in a different townland. It is held in a thatched cabin, which is very incommodious, and badly lighted. The furniture is indifferent; no black board. The classes were in most respects well prepared, and the teacher seems industrious and wedded to his calling. *a*, fair; *b*, deficient; *c*, good.
19. Farran temp. m.	Mar. 2,	37	50·5	Trained teacher. III^{3}.	House unsuitable, and although the school-room was to be only temporarily occupied, the school has been held in it for the last *four years.* Desks and forms sufficient; no black board. Only the fourth class answered well; the others were badly prepared. The teacher appears on the whole attentive, but meets with little encouragement from the parents of the children, or from any one else. *a*, fair; *b*, deficient; *c*, good.
20. Ditto, f.	Mar. 2,	28	35·6	Probationer, not trained.	School held in second apartment of house just described; furniture indifferent. Except in spelling and reading, the pupils have made little progress. Teacher is very inexperienced in school management, and her attainments are limited. Altogether the children derive little benefit from their attendance at this school. *a*, badly kept; *b*, bad; *c*, fair. N.B.—Teacher has ceased to be a servant of the Board.
21. Firmount, m.	Mar. 3,	18	24	Untrained teacher. III^{2}.	Slated house; windows, door, and walls require some repairs; room commodious and well lighted; desks and forms good, but no black board. The attendance at this school has greatly fallen off, owing to the decrease in the population. No fourth class. Except in dictation and arithmetic, the pupils' proficiency was pretty fair; writing well taught; cleanliness and order good; teacher careful and promising. *a*, fair; *b*, fair; *c*, good.
22. Ditto, f.	Mar. 3,	23	30	Trained teacher. II^{2}.	School held on second floor of house just described; school-room in all respects similarly furnished. In writing and arithmetic satisfactory progress has not been made, but in other branches the answering was rather good. Teacher is a smart, intelligent person. The time-table was obscurely filled up. *a*, fair; *b*, fair; *c*, good.
23. Abbey, mixed,	Mar. 7,	21	39	Trained teacher. III^{3}.	Slated house, and in good state of repair. Although I arrived at school only a few minutes before 10 o'clock, I observed no appearance of the pupils assembling. On pushing against the door it gave way, having been fastened from the inside by placing a large stone against it. Every thing in school-room was in a most confused and disorderly state; desks and forms unsteady. Teacher reached within a quarter of an hour after my arrival, when a few children began to assemble. No fourth class. The answering of the 15 pupils in the second and third classes was very poor. Writing from dictation has not been introduced. There was a great want of personal cleanliness, and of discipline. *a*, badly kept; *b*, very deficient; *c*, bad.
24. Kilnagicpagh, mixed,	Mar. 7,	24	37	Untrained teacher. III^{2}.	House very unsuitable, and in a bad state of repair; school-room badly furnished. The school is situated in a farm-yard, close to a manure heap, and without any proper avenue or means of approach. Even the very backward state of the locality does not excuse this unbecoming state of things. From want of books I found it difficult to examine the pupils, whose answering was in all respects deficient. Teacher receives no local support or encouragement, and sees no advantage in having such a school in existence. *a*, badly kept; *b*, very deficient; *c*, bad.

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School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. CORK—*con.*					
25. Castletownsend, m.	Mar. 8,	38	48	Trained teacher. II^{1}.	Slated house, and in good state of repair; premises in some respects badly kept; school-room commodious and well furnished, but untidily kept. The senior classes have, in some respects, been well taught, but there was no evidence that the junior had received due attention. Dictation is not practised. There was much idle scribbling in the copy books. Discipline not good. Prompting in class general. Teacher is quite capable of having his school in a very different condition. *a*, fair; *b*, deficient—only *one* inkbottle to day between both schools; *c*, fair.
26. Ditto, f.	Mar. 8,	27	39	An untrained teacher, III^{2}.	House and school-room as described under last head; state of classes generally unsatisfactory. The mistress, who is daughter of the male teacher, has not exerted herself to secure an efficient school. The only good feature about the school was the cleanliness of the girls, but as I arrived at the school before the pupils were assembled, I suspect my arrival was *telegraphed*, as is a common practice, so that the children came specially dressed up. *a*, imperfect; *b*, very deficient; *c*, fair.
27. Reengaroga,	Mar. 9,	15	33	Untrained teacher. III^{3}.	Thatched house; roof slightly out of repair; floor very damp; furniture good; time-table badly constructed. The few children present were rather well prepared. Only the master's son had reached the Fourth Book. The school is situated on one of the islands on the west of the co. Cork. The people do not seem to set any value on educating their children, who are kept at home on the slightest excuse. The teacher and his family are almost starving. *a*. fair; *b*, deficient; *c*, good.
28. Ardagh, f.	Mar. 10,	56	68	Trained teacher. I^{2}. An untrained assistant. III^{3}. A paid monitress.	House and premises excellent; school-room well furnished and kept; appearance of the pupils neat in the extreme; all wore a uniform dress and caps. There were 10 girls present in the Fifth Book. The proficiency and attainments of all the classes were generally satisfactory. The discipline and system unusually good. This school has been a kind of nursery for National schoolmistresses, and its usefulness as a training school has been very generally felt. *a*, *b*, and *c*, good.
29. Scartleigh, mixed,	Mar. 13,	70	73	Trained teacher. III^{1}.	A well-built slated house; windows in great want of glazing; there are sufficient desks and forms, but no black-board; school-room very dirty, and there was a total want of discipline and order among the classes. I found one man (a pupil) smoking in the school-room. They boys and girls were on the high road in uproarious play. The teacher was not in attendance at my arrival, but came shortly afterwards, and stated that he had been at dinner. The answering of the pupils was in every single particular shamefully bad. The people of the locality, however, seem to think highly of the teacher, but there never was a more misplaced confidence. He is unteachable and inefficient to a degree. *a*, very incorrect; *b*, deficient; *c*, very bad.
30. Ballyknock, mixed,	Mar. 14,	53	59	Untrained teacher. III^{2}.	House and premises badly suited, and a good deal of inconvenience arises from the teacher's residence and the school-room being approached by the same door. Furniture very bad, and badly arranged; no black board. In geography and writing, the proficiency was bad, but in other branches fair. Writing from dictation has not been practised. There was a great want of intelligence among classes. The master is one of the "*old school*," and very untidy in his person. *a*, fairly kept; *b*, fair; *c*, good.

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School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. CORK—*con.*					
31. Rathcormac, m.	Mar. 15,	64	55	Trained teacher. II^1. A paid monitor.	House in repair; furniture good; school-room well kept. Answering of pupils generally good and intelligent. Master is a painstaking person, and his school evidences much careful teaching. *a*, fair; *b*, fair; *c*, good.
32. Ditto, f.	Mar. 15,	86	79	Trained teacher. I^2. An assistant, not trained. III^1.	House in fair state of repair; furniture middling; school-room very well kept; time-table badly drawn up. I had not time to examine all the classes. The girls in the fourth class, numbering to day 13, answered well in nine cases. The teacher is a systematic and intelligent person. *a*, fair; *b*, deficient; *c*, fair.
33. Fermoy, prep. m.	Mar. 16,	76	103	Trained teacher. I^2. An assistant a probationer, and not trained.	Large slated house of two stories; senior school is held in second story. Walls and doors require some repairs; furniture sufficient; school-room badly kept, the walls being covered with dust and cobwebs. There was a want of cleanliness and of discipline among the pupils. As soon as the boys reach the third class, they are promoted to the senior school. The answering was not good in any branch. Writing is fairly taught. The principal master seems earnest, but he is not effective as a teacher of young children. He does not adapt his language to their capacities. Time-table badly arranged. *a*, fair; *b*, fair; *c*, good.
34. Ditto, m.	Mar. 16,	65	80	Trained teacher. I^2. An assistant, a probationer and not trained.	The first and second lesson books are not read in this school. There were 41 boys present in the third, and 16 in the Fourth Book; some of the latter read occasionally in the Fifth Book. The answering on some subjects was very good. Geography and grammar are the least effectively taught branches. Dictation fairly attended to, and writing very successfully taught. Time-table not suspended. I cannot say much for the order or cleanliness. Teacher appears a steady useful schoolmaster. *a*, fair; *b*, fair; *c*, good.
Co. LIMERICK.					
35. Killacolla, m.	Mar. 27,	44	39	Trained teacher. I^2. An assistant, a probationer	Slated house, and with the exception of the want of a few slates, is in good state of repair; school-room commodious and well furnished; cleanliness and discipline good; but pupils wear their caps in school, which I consider a very objectionable habit. There were 7 boys in the Fifth Book, who answered well on all subjects, but they have received an undue amount of attention from their teacher, as the proficiency of the boys in the other classes was very unsatisfactory. Writing only is generally well taught. Teacher has been in the service of the Board since its establishment, but has still a good deal of energy left. Time-table not judiciously constructed. *a*, fair; *b*, fair; *c*, good.
36. Ditto, f.	March 27,	36	31	Teacher now in training. III^1.	School held in a smaller room of the house just referred to; furniture good; time-table badly constructed. The acknowledged teacher was absent at training, and the school was in charge of an inefficient substitute. The answering of all the classes was decidedly bad, nor could I observe any traces of the pupils having been once carefully taught. *a*, very irregularly kept; *b*, fair; *c*, fair.
37. Glenosheen, mixed,	April, 10,	53	68	Trained teacher. I^3. A workmistress.	House in good state of repair; it contains apartments for the teacher and his family; school-room fairly furnished and kept. There is no fourth class, and the answering of the second and third classes was, in no respect, good. The mechanical part of the instruction has been imperfectly imparted, while the pupils were exceedingly deficient in intelligence. The teacher bears a high character for ability, and his method of examining a class

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School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. LIMERICK —*continued.*					would lead one to look for very different results from those arrived at to-day. *a*, very well kept; *b*, good; *c*, very good. This school is handsomely endowed by Lord Ashtown.
38. Kilfinane, m.	April, 11,	72	67	Trained teacher. II¹. An assistant not trained. III.¹.	School held in a room of the village market-house, which is in a very bad state of repair, and badly adapted for its present use. The furniture is also of a bad description; no fourth class present. The attainments of the pupils in the second and third classes were rather creditable, while not a few displayed a good deal of intelligence. The writing was very indifferent, and the supply of paper bad. With the present staff of teachers more satisfactory results might reasonably be expected. *a*, fair; *b*, fair; *c*, good.
39. Kingstown, m.	April, 12,	7	37	Untrained teacher. III³.	Slated house, and in repair; premises not fully enclosed, and are exposed to trespass from cattle; school-room rather well furnished, but there is no black board; time-table injudiciously constructed. The small attendance was owing to the approach of vacation, which was to commence next day. Of the 7 children present, 2 were in the first and 5 in the second book. Of the latter, 4 read correctly, and 1 could work subtraction. *a*, very irregularly kept; *b*, deficient; *c*, fair.
40. Ballinleena, m.	April, 24,	62	49	Untrained teacher. III².	Thatched house, with clay floor; school-room badly furnished; no black board; time-table useless as a guide to the occupation of school time. Pupils' attainments very low, and in no department was there evidence of skill on the part of the teacher. Dictation not practised, and with the exception of the answering of 4 children on the map of the world, nothing favourable can be recorded, nor need any satisfactory results be looked for, while the school is conducted by the present teacher. *a*, fair; *b*, deficient; *c*, fair.
41. Ditto, f.	April, 24,	50	40·7	An untrained probationer.	School held in a room of the house just described, and is approached through the boy's school-room; furniture unsuitable; time-table useless. Classes generally very badly prepared. Teacher of limited attainments. Discipline bad. *a*, fair; *b*, deficient; *c*, indifferent. N.B.—Teacher has been dismissed since date of inspection.
42. Shanagolden, i.	April, 25,	48	37·5	Trained teacher. III².	A well built house, and in repair; school-room suitably furnished for an infant school. When the pupils can read the sequel to the Second Book of Lessons they leave for the boys' or girls' school. I saw this school at a bad season of the year, as the small children had not attended regularly, and many not at all during the winter. However, the spelling and reading should have been better. The classes attempted a few songs, but the singing was from first to last painfully discordant. Teacher does not adapt her language to the capacity of infants. In teaching addition, she spoke to the children, whose age averaged only 5½ years, of "vertical columns of figures," without explaining the meanings of the words. *a*, fairly kept; *b*, fair; *c*, good.
43. Ditto, f.	April, 25,	43	25·7	Trained teacher. II¹.	A good slated house; school-room well furnished. This school is in a *transition* state, most of the scholars having recently attended hedge schools where they contracted bad methods of spelling and reading, and were generally badly taught. However, the answering of the classes, and the discipline of the school, were not what might, under even existing circumstances, be reasonably expected from a person of the teacher's ability. There is evidently a lack of exertion. *a*, well kept; *b*, fair; *c*, good.

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School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. LIMERICK—*con.*					
44. Shanagolden, m.	April, 25,	51	44·5	Trained teacher. I^2. A paid monitor.	An excellent house with a commodious and well furnished room, which is neatly kept. There was a fifth class, in which only 2 boys were present. The general proficiency was not good. I found even the senior boys very slow in explaining the meanings of words, and very ignorant of the subjects they had read. In dictation and writing, fair progress has been made. The teacher is an active person, but has to attend daily at the Mount Trenchard Model Farm, which additional labour impairs his usefulness in relation to this school. *a*, fair; *b*, good; *c*, good.
45. Templeglantine, m.	April, 27,	53	77	Trained teacher. II^2.	Slated house, well built, and in repair; school-room commodious, and suitably furnished. There is a fifth class. The reading of the pupils was good, but of the attainments in any other branch I cannot speak favourably. Dictation has been wholly neglected. Teacher has not been industrious. The school is situated in a populous and rather backward locality, and could be made highly useful. *a*, fair; *b*, good; *c*, good.
46. Ditto, f	April, 27,	52	62	Untrained teacher. III^1.	House and furniture excellent; and in spelling, reading and grammar, the answering was fair. In other branches deficient. Very few girls attempted to write from dictation. Teacher is a very useful person among girls, whom she governs through their affections, but her attention has latterly been much distracted by her large family. *a*, *b*, and *c*, fair.
47. Croome, m.	April, 28,	98	60·5	Trained teacher. I^2.	School held at the end of the village, in a house which is but poorly adapted for the purpose. The furniture is good, and the school-room well kept; discipline good. The few boys in the fourth class were generally well prepared, and so were those of the second and third classes in many respects. Of 56 above the first class, 43 read well. Dictation is very well attended to. The master is zealous and only wants to have a direction given to his labours. *a*, *b*, and *c*, good.
Co. CORK.					
48. Lisavaird, m.	May, 3,	53	33	Trained teacher. III^1.	Slated house, and in repair; furniture sufficient; school-room well kept. Pupils were, on the whole, well prepared, but their attainments were limited. No fourth class. The attempt at dictation was only middling. Discipline good. Pupils are called by their register numbers and not by their names. This practice has many advantages. Teacher is energetic, and has, for his years, a fair idea of school management. He spent two years at the Dunmanway District Model School. *a*, fair; *b*, fair; *c*, good.
49. Ditto, f.	May, 3,	51	43	Untrained teacher. III^1.	House as described under last head. There are sufficient forms and other school apparatus, but only one desk. The answering of the classes was very excellent, the good answering being 75 per cent. Discipline good, and appearance of pupils remarkably neat. The teacher is very young, but was well prepared for her office by a long attendance at the Ardagh Female National School. She has, besides, a natural aptitude for teaching. *a*, fair; *b*, fair; *c*, good.
50. Cape Clear, m.	May, 4,	40	42	Untrained and a probationer.	A very indifferent thatched cabin, containing two rooms with a wooden partition between, to separate the boys from the girls; furniture sufficient; a large slate used for a black board. The answering of the classes was in most particulars fair, and, under the circumstances, might be termed good. The island is about 10 miles from the main land, the channel often dangerous, and

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School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. CORK—*con.*					the means of communication bad. It was gratifying to find that in so remote a locality so much progress had been made. Irish is the vernacular, but even here it is becoming obsolete with the rising generation. I was informed that all the children present were related, as the islanders all intermarry. The children were not deficient in natural intelligence. Idiocy is rare in the island, which contains about 819 inhabitants. The teacher is very painstaking, but his literary qualifications are poor. *a*, fair; *b*, very bad; *c*, good.
51. Cape Clear, f.	May 4,	25	27·8	An untrained teacher. III^2.	This school is in a very inefficient state, and, I believe, chiefly owing to the inattention of the teacher, who seems to be occupied entirely with her domestic affairs, to the neglect of her school. This is to be regretted the more as there is only the one school on the island *bonâ fide* open to Roman Catholic children. As specimens of the pupils' ignorance, I may mention, that the most advanced said "Ireland belonged to America," and that "England was the capital of Ireland." Teacher is quite capable of having her school in a very different state. *a*, indifferent; *b*, bad; *c*, bad.
52. Tullig, f.	May 11,	34	27·5	Untrained. III^2.	Slated house, in fair state of repair; furniture pretty good, but no black board; time-table very injudiciously filled. With the exception of the answering of four girls in the fourth class, the general answering was bad. There is a want of life and intelligence in the teacher's method of conducting her school. *a*, correct but slovenly; *b*, bad; *c*, indifferent.
53. Ballyvougane, m.	May 12,	17	34	Untrained. III^2.	Slated house, situated in a chapel yard; walls dirty, and the partition between the boys' and girls' school-rooms is in bad state of repair; time-table badly arranged. The school was in charge of one of the boys of the fifth class, owing to the sudden illness of the teacher. The pupils in the fourth and fifth classes answered fairly, but those in the Second Book were badly prepared. *a*, fair; *b*, bad; *c*, fair.
54. Ditto, f.	May 12,	15	28	Probationer, not trained.	House as described under last head; desks and forms sufficient, but not arranged in the most advantageous manner; no black board; time-table badly constructed. Judging from the answering of the few pupils present, and from all I observed, I would say that this school is of very little service to the locality. The girls in the fourth class, however, were well prepared; but there was a want of steadiness about the girls and the teacher, and there were many irregularities observable, which made me question the teacher's fitness for her office. *a*, *b*, and *c*, bad. N.B.—Teacher has since been removed.
Co. KERRY. 55. Goulane, mixed, .	May 16,	32	19	Trained teacher. II^1.	Slated house, and in repair, but walls very damp. There is no enclosing fence, and the premises are much injured by trespass from cattle. Furniture fair. There were no children present more advanced than the Second Book of Lessons, and most of these had only recently returned to school after a long absence. The school is situated in a thinly populated and mountainous country; and, in winter, 50 per cent. of the children cannot cross the rivers, as there are no bridges. Master is capable of conducting a school effectively. *a*, very good; *b*, good; *c*, fair.
Co. CORK. 56. Castletown, Berehaven, m.	May 17,	51	53	Trained teacher. I^2. A paid monitor.	Slated house, well built and circumstanced; in repair; furniture requires some repairs. There was only one boy present in the fourth class. The answering of the pupils was good; all subjects seem to receive a due share of attention; but writing is not well taught. There was a want of order observable in school-room, and of

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School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	Remarks.
Co. Cork—*con.*					steadiness among the classes. Teacher is evidently regardless of these details, although in other respects attentive. *a*, *b*, and *c*, good.
57. Castletown, Berehaven, f.	May 17,	94	96	Trained teacher. I^{2}. An assistant a probationer.	School held in upper room of last house; furniture also wants some repairs. There were six girls in the fifth class, who were fairly prepared; dictation is carefully attended to; and, indeed, on most subjects, save grammar, the classes were well made up. In this subject a few girls monopolised the answering. In the advanced rules of arithmetic pupils failed. School has for a long time borne a high character in this part of the country, which is remote and isolated. Teacher is intelligent, and appears to take an interest in her pupils' success. *a*, fair; *b*, good; *c*, excellent.
58. Cahermore, .	May 18,	14	31	Untrained teacher. III^{1}.	House held in the wing of a chapel, which is partitioned off for school purposes. There are two rooms, one occupied by boys, and one by girls. The girls' school is not recognised by the Board. The floor is bad; the walls unplastered; and there was no fastening for the door; furniture of a bad description, and everything connected with school-house unsatisfactory. There were only 14 pupils present, and, judging from their answering, no attention had been paid to their instruction. The parents are indifferent about the education of their children. Teacher receives no local support, and is apathetic and inefficient. School is quite undeserving of the continuance of the Board's aid. *a*, fair; *b*, bad; *c*, very bad. N.B.—Teacher dismissed since date of inspection.
59. Cluin, m.	May 18,	23	41	Untrained teacher. III^{1}.	House badly adapted for school purposes, but the only one that can be had in the village, which is close to the Allihies, or Berehaven copper mines; furniture insufficient; no black board. The literary status of the school is very low; it has suffered from a succession of bad teachers. The present master is a very active, industrious person, but he has not been quite one month in charge of this school. *a*, good; *b*, fair; *c*, good.
60. Ditto, f.	May 18,	42	41·7	Untrained teacher. III^{2}.	School held in second story of house just described, and is approached *by a ladder* from the boys' school-room, which is a very objectionable arrangement; roof in bad state of repair, and room altogether unsuitable; furniture middling; no black board; time-table badly arranged; no fourth class, and only *two* present in the third class. The junior classes answered fairly. The average age of the girls present was not quite 9 years. Girls able to work receive employment at the mines, so that very little instruction, beyond an imperfect acquaintance with reading and writing, is received. The latter branch, too, is badly taught. Teacher is rather intelligent, but wants training. *a*, fair; *b*, bad; *c*, fair.
61. Cahergariffe, mixed,	May 19,	48	53	Untrained teacher. III^{2}.	A thatched cabin, quite unfit for school purposes; desks and forms tolerably good; no fourth class, and only one child present in Third Book. Six could read the Second Book correctly, two knew notation, and ten subtraction, which constituted the literary attainments of the whole school; yet the average age of the children was 10 years. Teacher's own acquirements are limited, and he has little incentive to exertion. The locality is miserably poor, and remote. *a*, *b*, and *c*, fair.
62. Creenagh, mixed,	May 19,	77	60	Untrained probationer.	Slated house, much in want of repairs; roof and windows in a very bad state. The school-house is situated on Bear Island, at the northern extremity of Bantry Bay. The room is sufficiently commodious, but not well furnished; time-table badly arranged; no fourth class;

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School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. CORK—*con.*					the answering of the third class was on the whole rather good; writing is badly taught. The pupils in second class knew little beyond spelling and reading. The teacher is very rustic in his manner, but appears earnest. From want of any kind of training his knowledge of school management is very trifling. The appearance of the children was particularly healthy and robust. I remarked that most of the female children wore rings, or bits of cheap trinkets. *a*, middling; *b*, bad; *c*, fair.
63. Rossmacowen, m.	May 22,	36	27	Untrained teacher. III^{2}.	A well built house, containing two rooms, in perfect state of repair; the carpenters' work, however, is roughly executed in some respects; furniture good; no fourth class; only *one* present in Third Book; he answered well on most subjects. The pupils of the second class were fairly prepared. Teacher seems to have been attentive latterly, and it is reasonable to expect that this school will become efficient and useful. *a*, good; *b*, fair; *c*, good.
64. Ditto, f.	May 22,	36	25	Untrained teacher. III^{1}.	School in an inchoate state; books of free stock have not yet arrived. The children, however, had in most cases, books, and they were generally well prepared in their business. Mistress only took charge of this school on the 10th January, 1854; she is very zealous. Needlework receives much attention. *a*, well kept; *b*, bad; *c*, fair.
65. Adrigole, f.	May 23,	25	32	Trained teacher. II^{1}.	A slated and well built house, in fair state of repair; school-room commodious, and well kept; furniture requires attention. There is a school for boys here, but it has been inoperative for some time, from want of a teacher. Indeed, owing to the great decrease in the population, two schools do not appear to be required. The classes were rather well prepared on most subjects, but writing is neglected, and the intelligence of the pupils does not appear to be cultivated. Teacher has not been sufficiently industrious. *a*, indifferent; *b*, deficient; *c*, fair.
66. Trafask, m.	May 23,	74	55	Trained teacher. II^{2}.	Slated house, requiring some repairs; windows much in need of glazing; furniture in a bad state; school-room commodious, but not well kept; appearance of boys very rough and uncombed; no fourth class. Except in reading, the simple rules of arithmetic, and of a few in geography, the answering was very poor. The irregular attendance of the children, and the great difficulty they find in expressing their ideas in English, may account for the want of intelligence. Most of those present spoke Irish, and a short time since heard no other language. There was but one pair of shoes among the 74 pupils. *a*, very good; *b*, bad; *c*, fair.
67. Ditto, f.	May 23,	47	31	Trained teacher. II^{2}.	Remarks upon house under last head applicable; furniture good; time-table badly constructed. Except in reading and geography, the pupils' proficiency could not be considered satisfactory. The pupils' attendance is very irregular, so that it is difficult to have them well prepared; besides, English is almost a foreign language to them. Teacher meets with little support, and is evidently discontented with her position. *a*, indifferent; *b*, deficient; *c*, good. N.B.—I had the assistance of the District Inspector in examining the three last named schools, otherwise I could not have examined all the children in one day.
68. Glengariffe, mixed,	May 24,	46	43	Untrained teacher. III^{2}.	Slated house, in very bad state of repair; the windows are so broken, and the walls so damp, the attendance in winter is very small; furniture fair. Latterly the school has been attended almost exclusively by boys, as a workschool for girls has been established in the locality,

GENERAL REMARKS on 106 NATIONAL SCHOOLS inspected by DR. NEWELL during the year 1854.

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	Remarks.
Co. CORK—*con.*					at which most of them attend. The pupils have made fair progress, and there was a good deal of intelligence among the senior boys. The teacher is active and efficient beyond his class. *a*, good: *b*, fair; *c*, very good.
69. Derryconnery, mixed,	May 24,	20	26	Probationer, not trained.	House, except the windows, which require to be glazed, is in a good state of repair. It is situated on Glengariffe Bay. The population around is very thin. Before the school was established the children spoke only the Irish language. The few present answered very well. Teacher is inexperienced, and poorly qualified, but is very earnest and painstaking. *a*, good; *b*, very bad; *c*, good.
70. Mallow, m.	June, 5,	91	115	Trained teacher. I^2. A paid monitor.	House in a bad state of repair, and in every respect unsuitable; the two rooms occupied for school purposes are choked with furniture. There were some geological specimens, solids, and other useful objects in the school. The proficiency of all the classes was far above the average, and was, in most branches, very satisfactory. Teacher has *instructed* them very successfully, but there was a great want of order and discipline in the school; but the teacher has more than ordinary difficulties to contend against. *a*, fair; *b*, good; *c*, unsatisfactory.
71. Fivemile Bridge, mixed,	June, 6,	100	73	Untrained teacher. III^2.	Slated house, and in repair, but badly lighted and ventilated; school-room insufficiently furnished, and wholly unequal to the accommodation of the numbers attending; the children were literally *jammed* together to-day, and many of them (I counted 17) were sitting on the floor; time-table badly arranged. The pupils of the fourth class read well, and answered fairly in arithmetic, but in all other respects, they, and the pupils of the other classes generally, were badly prepared. Indeed, it would be impossible to teach such numbers effectively in so small a space; teacher, too, wants method and energy. *a*, badly kept; *b*, fair; *c*, fair.
72. Oysterhaven, mixed,	June, 7,	68	46	Untrained teacher. III^1.	School held temporarily in a barn, which is wholly unsuitable, but the landlord resumed possession of the house recently occupied; the furniture belongs to the vested school at Rennies, which is under the same manager. The Commissioners have not sanctioned any of these proceedings. Time-table badly drawn up. The answering of all the classes was unsatisfactory. In its present state the school is not entitled to a continuance of the Board's support. *a*, fair; *b*, deficient; *c*, fair.
73. Innishannon, mixed,	June, 8,	84	68	Two teachers, both untrained. III^2 & III^1 respectively.	Rather a good house, and in repair; furniture middling; time-table badly arranged. Only a few of the boys in the third and fourth classes were fairly prepared; the answering was generally very indifferent. Prompting in class was painfully prevalent. Both teachers, father and son, want energy; the former is one of the "old school," and is wedded to obsolete methods of teaching. *a*, fair; *b*, fair; *c*, good.
74. Ballingarry, mixed,	June, 9,	69	56·6	Untrained teacher. III^2.	Thatched house, and badly adapted for school purposes, but the best that can be had; furniture of a bad description and insufficient; no fourth class; proficiency of the pupils very low, the only exception being the answering of a few boys in the Third Book; prompting in class practised; discipline in other respects, too, defective. Teacher seems anxious, but has not been effective. *a*, fair; *b*, insufficient; *c*, fair.
Co. TIPPERARY. 75. Burncourt, m.	June, 22,	63	58	Trained teacher. II^1.	A good slated house, roof slightly out of repair; room very commodious and well furnished, but unswept and untidily kept; time-table badly arranged. The answering was good, but only nine of those present were in the second class. In dictation only was the progress unsa-

GENERAL REMARKS on 106 NATIONAL SCHOOLS inspected by DR. NEWELL during the year 1854.

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
CO. TIPPERARY —*continued.*					tisfactory. Teacher is industrious, but infirm in health. He should have an assistant. *a*, very good; *b*, fair; *c*, good.
76. Burncourt, f.	June, 22,	56	50·5	Untrained teacher. III^2.	Roof of this portion of the house also requires repairs. There is a door between the school-rooms which should be closed up. Furniture good. The proficiency of the pupils is very low; only three were present in the senior classes. The teacher has not been even moderately effective. There are excellent materials for a good school, but teacher has not turned them to account. She examined a class in an animated and searching manner, so that she is not ineffective from inability. *a*, fair; *b*, fair; *c*, good.
CO. CORK. 77. Castletownroche, m.	June, 23,	74	50	Trained teacher. II^1.	Thatched house, of a very middling description, and was at first intended for *temporary* occupation only; furniture bad. Except in writing and dictation, the senior classes were fairly prepared; the proficiency of the junior classes, except in geography, was good. Teacher takes an interest in the welfare of his school. *a*, *b*, and *c*, good.
78. Ditto, f.	June, 23,	80	63	Untrained teacher. II^2.	A very indifferent house, and requiring some repairs; furniture fair; there is a black board for show, as it is not used; no time-table suspended; school liable to interruption from its proximity to a noisy thoroughfare. Of the 74 present only 11 had reached the senior classes. Except in writing, the pupils have all made fair progress. *a*, pretty good; *b* and *c*, fair.
79. Passage, West, f.	July, 28,	67	72	Trained teacher. III^1. An assistant, not trained probationer.	An excellent house, and in repair, except the windows, which require glazing; premises not enclosed from the public road; desks and forms sufficient, but no work-table, and a very bad black board; walls dirty, and covered with cobwebs; a great want of order and discipline among the classes. The third and fourth classes were badly prepared in dictation and arithmetic; the writing was generally careless, and in no case good; in other branches these classes answered fairly. The pupils in the junior classes have learned little more than reading and spelling. Teacher seems rather deficient in knowledge of school management, but she found the school in a very backward and undisciplined state, when she took charge of it, three months since. *a*, irregular; *b*, deficient; *c*, fair.
80. Kilcoleman, mixed,	Aug. 2,	23	26	Untrained teacher. III^2.	Slated house, in repair; furniture pretty good. The attendance at this school is always small, and consists of young children; the average age of those present did not reach nine years. No third class; of the 23 present 18 were in the Second Book of Lessons; they answered poorly. The teacher is a person of a very limited capacity and attainments. *a*, fair; *b*, fair; *c*, good.
81. Newgrove, mixed,	Aug. 3,	22	19·8	Untrained probationer.	Thatched house, slightly out of repair. There are two rooms, one for school, and one for teacher; in the latter was a bed, but no other furniture, except a pail and a cup; no knife nor fork. Teacher's diet consists wholly of bread and milk. School-room badly furnished; no black board; the inscription "National School" not up. The answering of the pupils, was, on every subject, deficient. Teacher has been only a few months in the service of the Board; he receives no local support, and could, as a labourer, live much less wretchedly than he does as a national teacher. *a*, indifferent; *b*, very bad; *c*, bad. N.B.—School since struck off.
82. Burnfort, m.	Aug. 3,	32	33	Untrained teacher. III^2.	Thatched house, in tolerable state of repair, but badly lighted and ventilated; furniture very bad, the seats consisting of deal planks resting on large stones; no black board; time-table badly constructed; answering

GENERAL REMARKS on 106 NATIONAL SCHOOLS inspected by DR. NEWELL during the year 1854.

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
CO. CORK—*con.*					of the pupils on every subject very insufficient. The teacher was fertile in excuses for the inefficient state of his school, but its shortcomings are to a great extent attributable to his unsuccessful method of teaching. The parents of the children, however, do not seem to value education, nor to have received any ideas of its advantages. *a* and *b*, bad; *c*, indifferent.
83. Knuttery, mixed,	Aug. 4,	35	31	Untrained teacher. III^1.	Thatched house, and in repair, but badly lighted; furniture sufficient, but constructed on a bad plan; no black board; time-table not well arranged; school-room occasionally used for domestic purposes. The answering of the pupils was in most respects satisfactory, but they have not been carefully catechised on the subjects of the lessons, nor on the meanings of words. Teacher is industrious, but his labours want direction. *a*, fair; *b*, fair; *c*, good, except for the misappropriation of school-room.
CO. KERRY. 84. Fossa, mixed,	Aug. 8,	–	–	Trained teacher. II^2.	Slated house, in good state of repair; there is a paved floor, which is in many ways objectionable; furniture good; no fourth class. The answering in geography and arithmetic was very poor, but in other respects good. School has suffered recently from the prevalence of epidemics, and the teacher's energies have been prostrated by family affliction. *a*, fair; *b*, fair; *c*, good.
85. Kilquane, mixed,	Aug. 9,	67	55	Untrained probationer.	A slated house, and in good state of repair, save ceiling, but very much in want of an enclosing wall or fence; furniture good; walls require whitewashing; no fourth class; pupils chiefly speak Irish, and *think* in it always; their knowledge of the Lesson Books and of the subjects generally taught in National schools was very imperfect. Teacher is energetic, but unskilful. He appears, however, apt, and anxious to carry out his superior's suggestions. Prompting in class universal. *a*, fair; *b*, very bad; *c*, fair.
86. Smerwick, m.	Aug. 10,	42	26	Trained teacher. III^1.	Slated house in good state of repair, with the exception of a few broken panes; furniture good; room neatly kept; school in the same parish as the last-named school, and the people's knowledge of English nearly as limited. No fourth class. The classes have made little progress, although a considerable amount of care seems to have been bestowed on the pupil's instruction by the teacher. *a*, good; *b*, bad; *c*, good.
87. Ditto, f.	Aug. 10,	56	33	Untrained probationer.	House and school-room as under last head; premises very neatly kept. The answering of the pupils was, under the circumstances, good, and there is a healthy tone in the school. The teacher was herself very imperfectly taught, but she communicates whatever information she possesses with success. *a* good; *b*, bad; *c*, good.
CO. CORK. 88. Vicarstown, mixed,	Aug. 14,	40	44·5	Untrained probationer.	A slated house, and in very bad state of repair generally; furniture good; no black board; a great want of tablet lessons; time-table badly arranged; pupils attend very irregularly, and know very little. The locality is one of the most remote in Ireland, and the inhabitants are very primitive in their habits. The school is close to the most westerly point in the island; Irish is generally spoken. The teacher is wretchedly supported, and the school, as an instrument for improving the children of the locality, is of little use. *a*, good; *b*, very deficient; *c*, indifferent.
CO. KERRY. 89. Brackluin, f.	Aug. 16,	44	62·6	Untrained. III^2.	Slated house and in repair; the ground attached to the house is in a wild and neglected state; the school-house is well furnished and commodious; no black board; time-table was lying across some scattered papers. When I reached the school at 10½ o'clock, there was no

GENERAL REMARKS on 106 NATIONAL SCHOOLS inspected by DR. NEWELL during the year 1854.

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
CO. KERRY—*con.*					appearance of the teacher or the children. I called at the residence of the former, who said she had no idea the day was so far advanced. Shortly after my arrival, the children began to assemble. The pupils answered fairly in a very few cases, and there was a great want of intelligence. Teacher has been habitually careless in her mode of keeping the school accounts, and I fear in general. *a*, very bad; *b*, deficient; *c*, indifferent.
90. Ardamore, mixed,	Aug. 17,	60	34	Untrained probationer.	Slated house, requiring to have the roof and walls repaired; furniture rather good; no black board. I never met so many pupils in one school so badly taught; they literally knew nothing about any branch or subject, and yet they have been learning all the ordinary ones. Much labour will fall upon the present teacher's successor in *unteaching* the pupils. The parents are more ignorant than their children, and there is no one to see that the latter are properly taught, except the Board's Inspectors. In February last, the District Inspector reported the incompetency of the teacher, and the Board dismissed him; but he is still allowed by the manager to remain in charge of the school. Retaining such a man is a positive injustice to the children of the locality. *a*, very bad; *b*, very deficient; *c*, very irregular. N.B.—Teacher dismissed since inspection.
91. Lisatavalla, m.	Aug. 18,	24	38	Untrained probationer.	A small thatched house, badly lighted, but clean and in good state of repair; furniture rather good; no black board; no time-table; no third class. Proficiency of pupils quite discreditable. Teacher unfit. *a*, bad; *b*, fair; *c*, indifferent.
92. Ditto, f.	Aug. 18,	32	34	Untrained teacher. III^2.	House and furniture as described above; no third class. State of school generally very unsatisfactory. Answering of pupils deficient in every branch. Teacher poorly qualified and very ineligible as an instructor. *a*, fair; *b*, fair; *c*, not satisfactory. N.B.—Teacher was depressed at subsequent examination.
CO. WATERFORD.					
93. Aglish, m.	Aug. 31,	46	33	Untrained teacher. II^1.	A slated house of one story, and in good state of repair; furniture very bad; no black board; no time-table suspended, but the teacher is engaged in filling up one. The school seems to have improved since the appointment of the present teacher, who is zealous and efficient. No fourth class. The pupils of the second and third classes were well prepared in most subjects of their course. *a*, very good; *b*, fair; *c*, good.
94. Ditto, f.	Aug. 31,	24	33	Trained teacher. I^2.	School held in the smaller room of the house described above; furniture middling; time-table badly arranged. The pupils were not well prepared, and there was a want of life in the school, which appears to be the result of the passive manner and listlessness of the teacher. *a*, fair; *b*, good; *c*, fair.
CO. CORK.					
95. Kilcounty, mixed,	Sept. 1,	26	40	Untrained teacher. III^2.	A slated house of one story; the windows, floor, and roof, require some repairs; furniture fair; time-table badly arranged. The classes answered well, the exceptions being writing from dictation and writing; which latter wanted size and freedom. Teacher is an active person, and I think faithful in the discharge of his duties. *a*, fair; *b*, fair; *c*, good.
96. Goggins Hill, mixed,	Sept. 28,	38	33	Untrained teacher. III^2.	A slated house, forming the wing of a chapel, but separated from it by a partition wall. As the windows cannot be opened, the ventilation is bad. Desks and forms sufficient, but no press nor black board. Time-table badly arranged. In writing, geography, and dictation, the answering was deficient, but in other respects fair. There was a want of discipline and order

GENERAL REMARKS on 106 NATIONAL SCHOOLS inspected by Dr. NEWELL during the year 1854.

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. CORK—*con.*					observable during the whole time of my visit. I found the teacher reading a treatise on book-keeping instead of minding his pupils. *a*, good; *b*, very deficient; *c*, bad. Inscription board not up.
97. St. Patrick's, m.	Sept. 29,	69	68	Trained teacher. II^{1}. An assistant, a probationer	A very excellent house and in repair, except the windows, which are constantly broken by stones thrown from the street; school-room commodious and well furnished, but not well kept; while the premises are in a filthy state. There was a total want of discipline among the pupils, and the moral tone of the school could scarcely be lower. The teacher took charge of this school in January, 1854, partly on my recommendation. It was then in a very unsatisfactory state, and the pupils, who are principally from the outskirts of the city of Cork, were noted for their insubordination. The present teacher has effected very little, if any, reformation in their manner or bearing. He has failed in energy and decision, and seems unequal to the task of controlling the boys. The proficiency of the classes was unsatisfactory, and altogether, there is nothing favourable to record of this school. *a*, indifferent; *b*, fair; *c*, good.
Co. KERRY.					
98. Kenmare, indus.	Oct. 11,	29	43	An untrained teacher. Instructed specially in needlework.	This is a school for girls, and is held in a well-built and suitable house, opposite to the Vested Female National School. Only two hours are devoted daily to literary instruction, but all the ordinary branches are taught. However, very little progress is made, as the girls attend specially to learn needlework, which is a more or less remunerative employment. Embroidery, guipure, and other kinds of fancy work are executed here. The chief market for the sale of the work is a house in London. In summer the Killarney tourists purchase rather extensively. I think the school has been productive of much good, but the prices paid are not at all commensurate with the value of the work done. The average age of the girls present was somewhat over 13½ years. Their appearance was neat and orderly, *a*, fair; *b*, insufficient—no desire to purchase books; *c*, good.
Co. CORK.					
99. Castlemartyr, mixed,	Oct. 19,	46	56	Trained teacher. III^{1}.	Slated house, and, with the exception of the windows, which require glazing, in repair; some of the furniture is in a bad condition; time-table carelessly drawn up. The answering of the pupils was very unsatisfactory, the only exception being that of the boys in the fourth class, and even they were deficient in the knowledge of arithmetic and geography. There was a great want of discipline—a constant hum and conversation among the classes. Altogether, the school is much below *par*. Teacher cannot have paid due attention to his business. *a*, very bad; *b*, very deficient; *c*, fair.
100. Blackrock conv.	Nov. 11 and 12,	155	178	Ladies of convent.	The school is held in a slated house, a short distance from the convent; there are three rooms, two of which are used for school purposes. These are suitably furnished and well kept. The ladies of the establishment are the teachers. I cannot speak favourably of the answering of any of the classes, although there were 13 present in the Third Book, 14 in the Fourth, and 17 in the Fifth. The girls in the last class alone acquitted themselves fairly. I examined most searchingly for two days. The attendance of the pupils is very fluctuating, and their attention is directed rather to needlework than to literary instruction. Time-table not definite in its provisions. *a*, middling; *b*, good; *c*, unsatisfactory.
101. Dungourney, mixed,	Nov. 14,	61	67	Trained teacher. III^{1}.	Thatched house and in repair; school-room sufficiently commodious, but badly lighted, and without a fire-place;

GENERAL REMARKS on 106 NATIONAL SCHOOLS inspected by DR. NEWELL during the year 1854.

School and County.	Date of Inspection.	No. present.	Average daily attendance for 12 months.	Teaching power.	REMARKS.
Co. CORK—*con.*					furniture sufficient; pupils classed too high and beyond their powers. They were consequently, with the exception of a few boys in the fourth class, very indifferently prepared on many subjects. Teacher appears zealous, but wants judgment in school management. Habits of personal tidiness not inculcated. *a*, fair; *b*, fair; *c*, good.
102. Ballyclogh, m.	Nov. 15,	60	45	Untrained probationer.	This school was originally a dwelling-house, and is badly adapted for its present use; there is a bad earthen floor; the furniture is unsuitable, the seats consisting of boards resting on large stones; no black board; premises in a most disorderly state; no fourth class. Pupils only recently received the first supply of books, and have made very little progress in their studies. In no branch was the answering at all good. The teacher examined in geography in an *up-and-down* manner, without connexion. *a*, bad; *b*, deficient; *c*, very unsatisfactory.
103. Ditto, f.	Nov. 15,	44	57	Untrained probationer.	School is held in second floor of house just described, and is approached through the boy's school-room. The wall-plate is only 4½ feet from the floor, and one can touch any part of the roof with his hand. No ceiling to the flooring, which is bad and shaky. The teacher has done all in her power to make the school-room look neat. The first supply of books has been only a short time on hands, so that the pupils have not had an opportunity of making much progress. Teacher appears industrious. *a*, fair; *b*, deficient; *c*, good.
104. Killavullen, f.	Nov. 16,	35	50	'Till this day an untrained teacher. III^2. A trained teacher, I^1 has been appointed.	Slated house and in perfect repair; furniture bad and insufficient; time-table badly drawn up. The present teacher only took charge of this school to day. Her predecessor must have been very neglectful of her duties. There is a reasonable prospect that the school will, in future, be effectively conducted. *a*, incorrect; *b*, deficient; *c*. fair.
105. Glenville, f.	Nov. 17,	21	48	Untrained teacher. III^2.	Slated house, containing two school-rooms, and apartments for teachers. The approach to the girls' school-room is through the latter, which is objectionable; furniture sufficient; room dirty and unswept; teacher's desk and book press in a most disorderly state. There was a total want of discipline. The classes were badly prepared on every subject. The teacher lives in the village with her family, and has, besides her salary from the Board, an endowment of £15 per annum, for literally doing nothing. *a*, no reliance can be placed on the accounts; *b*. deficient; *c*, very bad. N.B.—Teacher was dismissed immediately after my inspection.
106. Passage, West, m.	Dec. 6,	106	130	Trained teacher. I^2. An assistant not trained. III^2.	Slated house and in repair, except some broken panes; room very commodious, but there is an echo, which interferes much with school business. The desks are of a bad description and in need of repairs. There is a terrestrial globe, the property of the teacher. The proficiency of the senior classes was satisfactory in all branches except in grammar. The *theory* of arithmetic too was not well known by the fifth class pupils. Six boys answered fairly in equations, geometry, and mensuration, Except in reading, the junior classes were not well prepared. The principal teacher is zealous, and, in many respects, efficient. As a disciplinarian he is not effective in this school. The parents hold him in high esteem, and deservedly. *a*, good; *b*. fair; *c*, good.

No. 2.—GENERAL REPORT upon Schools inspected in the year 1854, by JAMES PATTEN, Esq., M.D., M.R.I.A., Head Inspector of National Schools.

12th May, 1855.

GENTLEMEN,

I beg to transmit my Annual Report, for the information of the Commissioners, on the schools inspected by me during the past year.

Summary of Time for the year.—In consequence of other engagements, which have been fully detailed in my Weekly Journals to the office, I have been able to devote only forty-nine days to the inspection of Ordinary National Schools. The rest of the year, with the exception of twenty-eight days off duty, was occupied with official business, at the Education Office, writing general reports for the previous year; the examination and classification of teachers, male and female, in seven districts;* revision of their exercises, tabulating same, and writing returns to the office; two private and one public examination of the pupils attending the Newry and Bailieborough District Model Schools, respectively; in addition to *three* special examinations of Pupil-teachers, Monitresses, and candidates for office; visited and examined fifty schools, and forwarded reports on same weekly to the office; travelling, holding investigations, special reports on same, and correspondence, &c., included.

Number of Schools inspected.—During the forty-nine days devoted to inspection, I visited sixty schools; of these, three were not in operation, in seven I only partially examined the pupils. The children in the remaining fifty schools I examined carefully and strictly, in every instance requiring the teacher to take a portion of the examination, and to teach a class in my presence, to enable me to report upon his method of teaching and examining; his competency and general qualifications, except in the case of recent appointments, having been previously ascertained at the annual public examinations.

General Attendance of Pupils.—In the fifty schools I found 2,067 children* present, being 41⅐ per school on the average. This attendance I consider satisfactory, many of the schools being situated in remote and isolated localities. My visits to the schools were *always strictly private,* and quite unexpected either by the teacher or the managers. This desirable result I obtained by remaining for a *very short* period of time in any given locality. In this way the school is seen in its ordinary state, or what may be appropriately termed its every-day dress; consequently the report, on this account, will be much more valuable.

Of the fifty schools, eleven were attended by boys and ten by girls; the remaining twenty-nine were mixed, attended by both boys and girls under a master, and one under a mistress.—See the following table, in which is set forth the average attendance, compared with the number of pupils on the *school-rolls,* average age of the children, and average time spent at school, &c.

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* Comprehending the counties of Down, Armagh, Tyrone, Monaghan, Cavan, Fermanagh, Leitrim, and Sligo (*part of*).

Appendix G.

II. Head Inspectors' Reports on Schools Inspected and Teachers Examined.

Dr. Patten.

It appears that in fifty schools the attendance was as follows:—

—	Boys (11) Schools.	Girls' (10) Schools.	Mixed (29) Schools.	Total (50) Schools.	Proportion of the yearly average attendance, and of the number present to every 100 children on the Rolls.
Number of Pupils on School-rolls at the time of inspection, ...	949	784	2,421	4,154	—
Average daily attendance of Pupils for twelve months preceding my inspection,	482	372	1,078	1,932	46·5
Number of Children present on the *day* of my inspection, ...	459	413	1,195	2,067	50·0 nearly.

Average time spent by the children at school, ...	3	years.
Average age at which they commence attendance, . .	5	,,
,, ,, leave school, ...	$12\frac{1}{2}$	,,
Average time spent by the children in Male Schools, .	$3\frac{3}{5}$	,,
,, ,, Female Schools, .	$2\frac{4}{5}$	,,
,, ,, Mixed Schools, .	3	,,

Average age at which they commence attendance—

In the Male Schools.	$5\frac{1}{2}$	years.
,, Female Schools, ...	$4\frac{1}{2}$	,,
,, Mixed Schools, ...	5	,,

Average age at which they leave school—

In the Male Schools, ...	14	years.
,, Female Schools, ...	$11\frac{2}{12}$	,,
,, Mixed Schools, ...	12	,,

The average age of the 2,067 children who were present in the schools on the day of my visit I find to be 9 years.

Average time spent at School—The average time spent by the children at school appears to be about three years, scattered over a period of seven and a-half years, between the ages of five and twelve and a-half; thus devoting only about five months on the average, and those not consecutive, in each year, to school business.

From the above considerations it is obvious that our chief reliance must rest on that teacher who, from zeal, superior skill, and good methods of teaching, will be able to perform efficiently a large amount of work in the small space of time necessarily allotted to him. I must confess that I entertain serious doubts of attaining even the *minimum* amount of information requiste for the well-being of the humbler classes, in the short period of time above specified.

With reference to this question, however, which is surrounded by some difficulties, and of immense importance, I do not think that it would be expedient or desirable for the Commissioners at present to offer any direct inducements to the children to remain at school for a longer period. This important defect can only be remedied, safely, by the intervention of those agencies now happily, although, perhaps, imperceptibly, in operation, namely, increased employment for adults, with a higher rate of wages, and more enlightenment on the part of the parents as to the real interests of their children. These causes acting together, I have reason to hope, will have the effect of increasing the average time spent at school by one-third or, perhaps, one-half the present period; for I generally find that the pupil attends the school for a longer or shorter time, in proportion to the social position of the parent. Amongst an indigent population struggling for the bare necessaries of life we can have little chance of effecting much in the way of education, even if offered gratuitously.

Before proceeding further, however, and to avoid any misapprehension, I consider myself bound to state that as the foregoing observations apply more particularly to rural schools situated in poor and remote localities—and *most* of the schools now under consideration are of this class—it is quite a mistake to suppose, and then hastily to conclude, as some persons have done, that the Head Inspector will generally select good and well-conducted schools, under the management of wealthy and influential patrons, and consequently commanding a large and regular attendance, for the purpose of exhibiting a flattering report. I need hardly say, however, that the reverse of this is generally the case.

It will be readily seen that the annual reports since the year 1848 dwell more minutely, and go further into details, on the dark than on the bright side of the picture, simply for the purpose of bringing out prominently before the Commissioners the wants, defects, and shortcomings of the schools, with a view to their more speedy removal, in preference to parading before their eyes the *numerous* cases in which the system has been eminently successful.

I find from a report on the Midland Districts in England that the average age of 3,756 boys, in forty-six schools, was from 6⅞ to 8⅝ years; and of 2,301 girls, in thirty-three schools, from 7⅛ to 9¼ years.

The Very Rev. the Dean of Hereford speaks very judiciously on this subject, and seems to have hit upon the most probable causes of irregular attendance, which seem to operate in Ireland much in the same way as the Dean finds them to have done in England; he says—

> "In agricultural districts the employer does not encourage the labourer to educate his child; on the contrary, his mode of thinking and of acting is in every way against it. He has no feeling that the respectability of the labouring classes would be advanced by education; or if he has, he immediately becomes jealous of their being brought nearer to himself, not seeing that the class to which he belongs will, in the end, be equally advanced. In fact, he has no notion of worth in the labourer, as a man, or as a fellow creature; but only values him as a machine or instrument by which a certain quantity of work is to be performed; and does not think that—although he professes to be a Christian—it is any part of his duty, *as such*, to endeavour to improve the moral condition of the labourers about him, by making them more intelligent, more sober, and better conducted in every relation of life, or that by so doing he adds to his own respectability. In the eyes of too many of the employers the labourer who spends his money at the ale-house, neglects his family, and is perfectly regardless as to how they are brought up, is considered quite as useful as the one who would struggle hard to get his children an education, and try to raise them above those low and degraded habits to which they have hitherto been accustomed. Let those who act thus, if higher motives will not influence them, weigh well the observation of a modern writer, that 'Independently of moral grounds, the kindness, sympathy, and attention of an employer to his workmen, is the safest and most profitable money speculation in which he can engage.' I have never known a single instance of a farmer encouraging the labourer to send his children for any considerable period to school, no matter how trifling the work for which he wanted them. I have known instances of a parent wishing to continue a child at school, but his employer prevented him by requiring his services when *so young* that it would have been far more creditable, and even more advantageous, to have employed an older boy."

In connexion with what I have already stated as militating, in various ways, against the successful working, and consequent prosperity, of the schools, I may here observe that the teachers of twenty-four only out of the fifty schools have been trained at the Normal Training Establishment; so that if the *table* of *proficiency*, which is now to follow, and which has been drawn up with much care, shall come out favourably, we cannot feel otherwise than satisfied with the general results. Some persons might say, and apparently with good reason, and likely to obtain general assent, that a report upon fifty schools is too small a basis on which to found any general conclusions; and this would be true if the schools were situated in one or two counties or districts only, but it will be seen on referring to the tabulated particulars, that those I am reporting on are scattered over five counties, extending from the East to the West of Ireland.

The following table exhibits the proficiency of the pupils actually examined, and the answering, carefully noted at the time of examination. The proportion per cent. refers only to the number *learning* that particular branch, and not to the total number examined.

SUMMARY OF CLASSIFICATION, &c. (Fifty Schools—2,067 Children examined.)

Classification of those present—(2,067.)	Boys.	Girls.	Total.	Proportions to 100 Pupils.	Results of Examination by Head Inspector, 2,067 Pupils examined.	Number of Boys.	Number of Girls.	Total.	Proportion per cent. to number learning.
Reading—First Book of Lessons,	394	349	743	35·9	Of these there were—				
,, Second and Sequel to the Second,	430	324	754	36·4	Able to read with accuracy any chapter in Second Lesson-book,	116	101	217	28·8
,, Third,	255	151	406	19·6					
,, Fourth,	90	74	164	7·9	Able to read with ease and intelligence the Third and higher Lesson-books,	128	134	262	42·0
,, Fifth,	–	–	–	–					
Total,	1,169	898	2,067	99 8					
Grammar,	505	348	853	41·1	Acquainted with the Parts of Speech,	112	115	227	26·6
					Able to parse any easy sentence,	85	59	144	17·0
Geography,	565	409	974	47·1	Acquainted with the Map of the World,	162	140	302	31·0
					Acquainted with the outlines of the Maps of the Great Divisions of the World and of Ireland,	73	36	109	11·2
Arithmetic—Simple Rules,	339	259	598	28·9	Able to enter correctly, from dictation, numbers to seven places of figures,	161	115	276	26·4
,, Compound Rules,	94	66	160	7·8	Able to work subtraction correctly,	156	101	257	24·6
,, Proportion and above,	141	40	181	8·8	Able to work Practice correctly,	91	25	116	11·1
,, Mental Arithmetic,	69	35	104	5·0					
Writing—On Slates,	227	179	406	19·9	Able to write fairly,	230	144	374	45·7
,, On Paper,	496	322	818	39·6	Able to write with ease and freedom,	13	19	32	4·0
,, From dictation,	290	213	503	24·3	Able to write a sentence from dictation with tolerable accuracy,	100	69	169	33·6
					Able to write a passage with ease and freedom,	5	20	25	5·0
* Book-keeping,	7	–	7	0·3					
Mensuration,	11	–	11	0·5					
Geometry,	–	–	–	–					
Algebra,	–	–	–	–					
* Music,	42		42	2·0					
* Female Industry—Sewing,	–	211	211	10·2					
,, Knitting,									
,, Fancy-work,									

It will be seen from the above table that the per centage of the proficiency, in proportion to the number *learning* each particular branch, is, in general, satisfactory, with but few exceptions, which are to be included under the following heads, viz.:—writing from dictation, the parsing and analysis of a simple sentence, theory of arithmetic, and fair penmanship. The attention of the teachers has been specially directed to the above subjects, so necessary to be known by all before leaving school.

Reading.—Of the junior classes, twenty-eight, and of the senior classes, forty-two per cent. read with accuracy and intelligence the lesson *selected* for them by me from their respective lesson-books, and fairly answered the questions put in connexion with the chief points of information contained in it. I was sorry to observe, however, from the hesitation and surprise of the children, that in some schools the plan was new to them. I also found some teachers, in most cases apparently from want of practice, unable to question either fluently or intelligibly on the lesson read, and too frequently to seem satisfied if one boy in the draft is reading well, without taking care that every other child is an attentive and earnest listener.

The teacher, sometimes, also omits to correct a bad or false style of reading, either by reading over the passage himself, or by requiring the boy to write it down and then to read it over to him from his own writing. I have much pleasure, however, in observing that the *meanings* of words are more frequently taught in connexion with the reading-lessons, as they occur in the sentences read, and *not*, as formerly, with the spelling in columns, where the arrangement is arbitrary and without any necessary connexion.

In some of the schools—but I am sorry to say not yet in all—the teacher points out on the map, to the junior classes, the places, &c., alluded to in the lesson read.

Spelling.—The teaching of spelling by the eye as well as by the ear, by the dictation of sentences written on slates, is now more generally practised, particularly when increased time can be obtained by the presence of a monitor in the school, under whose superintendence the elder boys sometimes copy pieces of poetry and the exercises in grammar, likewise some of the more difficult words which occur in the reading-lessons, and giving the meanings in their own terms: there is more interrogation, and mutual questioning is occasionally adopted by even the junior classes. In my several tours of inspection I have frequently recommended the trial of this plan, which is now gradually making its way, and is attended by satisfactory results.

Writing.—This branch—as I have always thought, one of the most important in the education of the people, particularly of the humbler classes whose school attendance is so limited—is progressing tolerably, but is not so forward as it ought to be in many of the schools, where I had much reason to complain. I have generally found, as stated in my former reports, that when the teacher writes a good legible hand himself, and sets the copies occasionally for the pupils, he gradually acquires a taste for the subject, and is sure to make this branch popular in his school. An occasional copy on the black-board, written in chalk, to be copied on slates by the junior pupils, would be found a useful and expeditious preparation for commencing on paper.

Out of 818 writing on paper, which is nearly twenty-one per cent. of the entire attendance, four per cent. only could write a good hand with ease and freedom, and forty-seven and a-half per cent. tolerably.

Arithmetic.—In many of the schools this useful branch is not yet taught with sufficient skill, care, and attention. The old mechanical methods of working a sum on the slate, and of committing rules to memory without previous understanding or subsequent explanation, still prevails: the theory or *rationalè* of the process is not explained, and the *black-board* is seldom used.

On reference to the table, it appears that of 939 children learning arithmetic, 598, or twenty-eight per cent., were in the simple or elementary rules; 160, or seven and a-half per cent., were in the compound rules and Reduction; 181, or nearly nine per cent., were in Proportion and above, including Practice. Of these the amount of *proficiency* rates as follows:—

Acquainted with numeration and notation, ...	26 per cent.
Able to work a sum correctly in any of the four elementary rules, and capable of assigning a reason for the different steps in the process, ...	24 „
Capable of solving correctly ordinary questions in Proportion or Practice, ...	11 „

Mental Arithmetic.—Only 114, or five per cent. of the entire attendance at the schools, were learning mental arithmetic; and of these not more than one-third had made any considerable progress.

With reference to the *three branches* of education just noticed, which are taught in all schools deserving the name, an eminent educationist observes:—

> "There are three kinds of human knowledge which stand strikingly distinct from all the rest; they lie at the foundation; they constitute the roots of the tree: in other words, they are the *means* by which all other knowledge is acquired. I need not say that I mean reading, writing, and calculation.
>
> "Teachers do not, perhaps, always consider how entirely and essentially distinct these three are from all the rest. They are arts; the acquisition of them is not to be considered as knowledge, so much as the means by which knowledge is obtained. A child who is studying geography, or history, or natural science, is learning *facts*—gaining information. On the other hand, the one who is learning to write, or to read, or to calculate, may be adding little or nothing to his stock of knowledge. He is acquiring *skill* which at some future time he may make the means of increasing his knowledge to any extent.
>
> "This distinction ought to be kept constantly in view, and the teacher should feel that these fundamental branches stand by themselves, and that they stand first in importance. I do not mean to undervalue the others, but only to insist upon the superior value and importance of these. Teaching a pupil to read before he enters upon the active business of life, is like giving a new settler an axe as he goes to seek his new home in the forest.
>
> "The great object, then, of the common schools in this country is to teach the whole population to *read*, to *write*, and to *calculate*."—ABBOT *on Instruction.*

Grammar.—Out of the 853 pupils returned as learning grammar, which is twenty per cent. on the entire number attending school, twenty-six per cent. were acquainted with the parts of speech, and able to distinguish them as they occurred in their respective lessons; and seventeen per cent. were able to parse a simple sentence. There is here, certainly, some improvement upon former reports; but still the per centage of proficiency in this branch, in proportion to the numbers learning, falls short of what it ought to be.

Geography.—Of the 974 recorded as learning geography, which is forty-seven per cent. on the total number in attendance, it appears that thirty-one per cent. are acquainted with the Map of the World, and eleven per cent. with the great Divisions of the World and Ireland.

The teaching of geography, although still far from being in a satisfactory state, has made greater progress within the last three years than almost any other branch. Almost all the teachers now, *particularly* since the Map of the World has been given gratuitously as *free stock*, give more or less of instruction in this interesting branch. I am glad to observe that in several schools it is also taught *incidentally* with the reading lessons, the teacher pointing out on the map the places as they occur. Of course I must always except, from this favourable notice, those old teachers still, unfortunately, in the service, who cannot, or will not, learn this subject, in particular; and when urged upon the matter, the answer generally is, "That they will try to learn and do their best." One observed "that in his school-days a Map of the World, hung up in the school-room, would have been looked upon as a curious, but meaningless, hieroglyphic scroll, equally unintelligible to the schoolmaster as to his pupils, and equally despised by both," with the following quotation: "*Tempora mutantur nos et mutamur in illis.*" Doubtless the times have changed, and we have changed with them; but, unfortunately, the old teacher *alone* remains stationary.

Writing from Dictation.—In the fifty schools there were 503 children, twenty-four per cent. of the whole number in attendance, reported to me by their respective teachers as writing from dictation. Of these thirty-three per cent. were able to write a few sentences with tolerable accuracy, and five per cent. correctly, and with ease and freedom.

From the above statistics it appears that considerable improvement has taken place in this useful and most *essential* exercise since the year 1850. My Report on the schools inspected that year shows that of 2,598 children examined, there were—able to write from dictation a sentence with tolerable accuracy, one in twenty-seven, or something less than four per cent.

Although it may be supposed that the senior or more advanced classes form the proper field for the exercise of this branch, and although these classes may derive more especial benefit from the regular adoption of the plan, yet it will, nevertheless, be found on trial that all the classes, without exception, who are able to write, will be greatly benefited.

It would be in vain to expect, even from the senior pupils, without some such practice, and subsequently putting their thoughts upon paper in the way of a short letter or essay, even a *tolerable* attempt at Composition. Although, as regards other branches their progress may have been respectable, yet deficiency in this is continually felt, and often deeply deplored, when they shall be called upon to take an active part in the busy scenes of afterlife.

In superintending this exercise the teacher would do well to take care that the writing on slates, which is sometimes hurried, in catching and taking down the sentence dictated, does not degenerate into a scrawl; and thus tend to deteriorate the symmetry and regularity of the handwriting.

Some judicious remarks having been made on the subject of handwriting by Viscount Palmerston, and by two of her Majesty's Inspectors of Schools, in reply to his Lordship's suggestions, I take the liberty of appending them to this report.—*See Note D* (selected from the Report of the Committee of Council on Education, years 1853–4.)

Supply of School Requisites, Books, &c.—About one-third of the schools inspected and reported upon were unprovided with a proper supply of lesson-books, and other school requisites, such as stationery, &c. This defect, which can only be *effectually* remedied by time, increased prosperity, and more intelligence on the part of the people generally, is becoming less perceptible than formerly. The payments of the children are also more regular and satisfactory, the gratuitous list having become considerably diminished.

In the annexed table I have brought under one view some statistics regarding the incomes of the teachers, as derived from various sources.

Teachers' Incomes.—The following table exhibits the annual incomes of the teachers, as derived from various sources:—

	Boys' Schools (11 teachers.)			Girls' Schools (10 teachers.)			Mixed Schools (29 teachers.)			Totals (50 teachers.)			Average.		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Salary from the Board,	201	0	0	150	0	0	466	0	0	817	0	0	16	6	10
Income from School-fees, . . .	110	0	0	77	0	0	219	0	0	406	0	0	8	2	5
Income from Local Contributions, . .	10	0	0	8	0	0	18	0	0	36	0	0	0	14	5
Annual value of Residence, . . .	–			3	0	0	4	0	0	7	0	0	0	2	10
Total income from Schools, including *all sources*, .	321	0	0	238	0	0	707	0	0	1,266	0	0	25	6	6

The number on the rolls in the above schools at the time of inspection being 4,154, it follows from the preceding table—

1st. That the average amount paid to the Teachers by the Board alone for each pupil is	4*s.* 0*d.* per annum,	(£817)
2nd. That the average amount of School-fees paid by the people for each pupil is	2*s.* 0*d.* ,,	(£406)
3rd. That the average amount from local Contributions paid to the Teacher for each pupil is	0*s.* 2*d.* ,,	(£36)
4th. That the average amount of payment made to the Teachers from *all* sources for each pupil is . .	6*s.* 2*d.* ,,	
5th. Instead of the number on the rolls, if we take the average attendance as the basis of our calculation, we shall find that the average amount of payment made to the Teachers *from all sources* for each pupil is . .	13*s.* 2*d.* per annum.	Board's Sal., 8*s.* 5*d.* School-fees, 4*s.* 3*d.* Local Contributions, 0*s.* 5*d.* Residences, 0*s.* 1*d.* 13*s.* 2*d.*

It appears from the above table that the average income of the teachers is £25 6*s.* 6*d.*, as collected *from all sources.* The salary from the Board averages low, most of the teachers under consideration being in the inferior classes and untrained. The income from school-fees, however, averages £8 2*s.* 5*d.*, which is a considerable increase on that of former years for schools partly situated in the western districts. In my Report on the schools visited in the year 1850, situated in the counties of Donegal, Sligo, Leitrim, Roscommon, Monaghan, and Fermanagh, the average annual income of each teacher, from school-fees alone is set down at £3 2*s.* 7½*d.*; and the average income of the teachers, including all sources, is shown to be so low as £22 4*s.* 6½*d.*

We are now, I think, fully justified in hoping that from the present augmented scale of salaries, and the gradually-increasing prosperity of the country, together with the National System of Education becoming more popular and more appreciated as it becomes better known, the average salary of the teachers this year, from all sources, will amount to a sum considerably over £30.

Increase to Salaries of Teachers.—In my Report of the examinations of teachers for the year 1849 I observed that a further augmentation of the salaries of the teachers would be desirable in the following terms:—

"It is probable that the benevolent intentions of the Commissioners,

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exhibited towards the teachers in the late increase of salaries, which has been attended with such satisfactory results, may induce them to make a further augmentation as soon as sufficient *funds* may be placed at their disposal, &c."

I am happy to say that a very considerable increase has *now* been recommended and adopted by the Commissioners, and, I hope, will be available at the next payment; thus affording seasonable relief to many deserving teachers with families suffering under the pressure of the present high prices of provisions.

The augmentation in the scale of salaries has been so adjusted as to be more sensibly felt at the beginning and end of the series of gradations for the several classes and divisions; by this arrangement it is hoped that a *superior* class of persons will offer themselves in the first instance for the situation of teacher; and secondly, by making the salary of *first-class* teachers *remunerative* in the proper sense of that term, the Commissioners will be enabled to retain the services of those valuable men who are now either leaving our shores for more favoured lands, or turning their attention to more lucrative employments.

CLASSIFICATION of SCHOOLS as to efficiency, with regard both to the extent and quality of Instruction.

1.	Number of Schools in which the Reading is fair, . . .	18
	„ „ pretty good, .	20
2.	Number of Schools in which the Penmanship is good or pretty fair, ...	17
3.	Number of Schools in which Arithmetic is well taught, and to a fair proportion of pupils, ...	18
4.	Number of Schools in which Grammar is fairly taught, and to sufficient number of pupils, ...	20
5.	Number of Schools in which Geography is fairly taught, and to a fair proportion of pupils, ...	29
6.	Number of Schools in which Writing from Dictation is taught fairly, and to a sufficient proportion of the children, . .	14

FEMALE INDUSTRY—SEWING, KNITTING, AND FANCY WORK.

7.	Number of Schools in which the above subjects are fairly taught, and to a fair proportion of the female pupils, .	12

See programme of instruction for Male National Schools, or minimum amount of proficiency required *for each* class.—Note E, appended.

CLASSIFICATION of SCHOOL-HOUSES as to amount of Accommodation (allowing seven square feet to each Pupil.)

Number capable of accommodating 50 pupils, . .	13
„ „ 75 „	15
„ „ 100 „	12
„ „ 150 „	1

GENERAL CLASSIFICATION as to the State of Repairs, Furniture, and Fitting-up, &c.

Number of School-houses in which the state of repairs, furniture, &c.—

Is good, ...	22
Is pretty fair, ...	10
Is middling, ...	18

Rules and Regulations of the Commissioners.—The rules, &c., have, in general, been faithfully observed; and never, in any instance, so far as I could ascertain, has any infringement occurred from *wilful* neglect.

Religious Instruction.—Religious instruction is regularly given to the pupils on Saturdays, and before or after the hours devoted to the ordinary school business on the other week days, under the direction of their respective clergy, and in accordance with the wishes of their parents.

As I stated in my last Report, I have never known or ever heard of a single instance of meddling or interference, by any person whatever, in the matter of religion, in opposition to the wishes of the parents.

In conclusion, I have much pleasure in observing, that on a review of the schools inspected during the past year, amidst a considerable variety of character, I have been able to report deliberately and conscientiously in respect to a large portion of them, that as regards order, organization, &c., they are steadily improving; and that the *kind* of instruction afforded is, in many cases, in accordance with more enlightened views and improved methods, more easily comprehended, and more applicable to the affairs of every-day life.

I have the honour to be, Gentlemen, your obedient servant,

JAMES PATTEN,
Head Inspector.

The Secretaries,
Education Office, Dublin.

NOTE A.—HANDWRITING.

Correspondence as to deterioration in the Art of Writing.

(No. 1.)

From the Secretary of State for the Home Department to the COMMITTEE of COUNCIL on EDUCATION.

Whitehall, 24th May, 1854.

SIR,—I am directed by Viscount Palmerston to request that you will submit to the Committee of Council on Education, for their consideration, that one great fault in the system of instruction in the schools of the country lies in the want of proper teaching in the art of writing. The great bulk of the lower and middle orders write hands too small and indistinct, and do not form their letters, or they sometimes form them by alternate broad and fine strokes, which make the words difficult to read. The handwriting which was generally practised in the early part and middle of the last century was far better than that now in common use; and Lord Palmerston would suggest that it would be very desirable that the attention of schoolmasters should be directed to this subject, and that their pupils should be taught rather to imitate broad printing than fine copper-plate engraving.

I am, &c.,
(Signed) H. WADDINGTON.

The Secretary,
Committee of Council on Education.

The following replies to the above communication were made by two of Her Majesty's Inspectors of Schools:—

From Her Majesty's Inspector of Schools, the Rev. F. WATKINS, to the COMMITTEE of COUNCIL on EDUCATION.

Thrybergh, 27 May, 1854.

SIR,—I have the honour to acknowledge the receipt of your letter, of the 24th instant, with a copy of a letter from Viscount Palmerston, on the subject of handwriting.

I am inclined to think that a great part of the evil of which his Lordship so justly complains is owing to the use in schools of very

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cheap and very bad steel pens, which make a very broad down stroke, as it is called, and an almost invisible up stroke. I do not believe that, with such pens as these, the handwriting which Lord Palmerston desires can be formed in our schools.

I have the honour to be, &c.

The Secretary of the Committee of Council on Education. (Signed) FREDERICK WATKINS.

(No. 3.)

From Her Majesty's Inspector of Schools, the Rev. H. LONGUEVILLE JONES, to the COMMITTEE of COUNCIL on EDUCATION.

Rhyl, 29 May, 1854.

SIR,—I have the honour of receiving your circular letter, with the copy of one from Mr. Waddington, written by the desire of Lord Palmerston, concerning defective handwriting in schools.

I am personally so glad to find this subject adverted to, that I cannot avoid making the following remarks upon it.

In many schools I find writing taught on the most unsatisfactory plan; bad copybooks used, bad copies printed or set; young children made to *commence* with small hand; and, frequently, if the *master is certificated*, the subject considered below his notice. It will certainly be my care in future to report most stringently upon this branch of instruction, specially in the case of apprentices and masters. I apprehend, however, that the subject is neglected at the training schools, and that, to ensure a thorough reform, something must be done with those institutions.

My impression is, in accordance with the Scotch system, that young people should be taught to write as large a hand as possible, and that the use of *small hand*, as it is technically called, should be abolished in all copybooks. I believe that the practice of writing on vertical surfaces, at almost arm's length, so as to use the whole limb from the shoulder joint as much as from the wrist, and in characters not less than six inches in height would be found (as I have found it from long practice with pupils) to be one of the very best supplementary methods for forming a good hand. It is the principle of the artist standing before his canvass on the easel, at as great a distance as possible. The eye is as much concerned in writing as the hand. The practice of frequent dictation on slates is liable to become very destructive of caligraphy. The children naturally get into a scribble, and, unless special care be taken, much of the good done on paper is undone on slates.

I have spent much of my leisure time in the reading and deciphering MSS. of all dates and nations; I have prosecuted long researches among public record offices in this country and on the Continent; and I would beg leave to express my conviction of the accuracy of Lord Palmerston's remarks that the handwriting at the commencement and during the middle part of the last century was far better than it is now. It is the common opinion of most record officers that our MSS. of the present day will be almost undecipherable in future ages. The handwriting of the time of the Commonwealth was peculiarly bad; but, soon after that period, the *Italian hand*, long practised abroad, was introduced by writing masters into England, and the caligraphy of the upper classes rapidly improved. The English monarch who wrote the best hand of any that ever ascended the throne was James II. He was educated abroad, and formed his hand on the finest Italian model. His earlier MSS., and his signatures, are peculiarly good and legible; and his hand was legible to the latest day of a protracted life. Any record office can produce specimens of the Italian handwriting of that period. It was certainly the most elegant of any current hand ever used. The most illegible and conventional style of hand that has appeared in England is the common commercial hand of our own time. It is a system of arbitrary marks, intended for a particular purpose, and legible by a special class of persons only. I attribute the formation of this conventional commercial hand to the use of too round a system of letters in school copies. The letters are not angular, nor tall enough; *m*, *n*, *i*, *u*, *e*, and *c*, being all formed commercially thus "*uuu*."

I am convinced that we ought to revert to the old Italian system of caligraphy, and that the public service would gain as much by this as by the imitation of printing hand. Our typographical forms of this century run too much into circularity, and into needless contrasts of thick and thin. A reaction in public taste has already settled the question concerning arithmetical signs, and it is working its way even with the letters of the alphabet.

I would venture to suggest that, as the subject is really one of much importance, their Lordships might order persons, qualified for the purpose, to examine into the state of common writing, whether in schools, in offices, in trades, or in ordinary life, and to report to them upon it, with the view to arrive at positive and scientific data, whether of theory or of practice; so that some feasible method of amelioration might be recommended to all schoolmasters.

I have the honour to be, &c.

The Secretary of the (Signed) H. LONGUEVILLE JONES.
Committee of Council on Education.

NOTE B.

PROGRAMME of INSTRUCTION for Male National Schools, or minimum amount of Proficiency required for each Class.

First Class.—Children in the highest division of First Class will be expected *at least*—To name the Days of the Week, and the Months and Seasons of the Year. To count correctly and intelligently up to 20. To read any number up to 20. To add *mentally* any two or more single digits (as 5+4+6+3) whose sum shall not exceed 20. To spell correctly the simpler words of the lessons they shall have previously read, and to understand their meaning. To know the vowel sounds. To answer simple questions on the subjects of the lessons already learnt by them.

Second Class.—Children in the senior division of the Second Class will be expected—To read and set down any number of three places of figures. To know the addition and subtraction tables. To be able to work on Slate or Black Board simple questions in Addition and Subtraction, no part of the work including any number of more than three places of figures. To name the syllables in a Word. To distinguish readily, in any easy sentence selected in their daily lessons, the Article, Noun, and Adjective. To know the Outlines of the Map of the World. To Write on Slates. To spell correctly the simpler words of the Lessons they may have already read, and to understand their meaning. To answer Simple Questions on the Subjects of the Lessons

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Dr. Patten.

already learnt by them, and to be able to repeat correctly and neatly such Lessons as are in Rhyme.

Sequel Class.—Children enrolled one Quarter or more in either Sequel Class will be expected—To read and set down any number of five places of figures. To know the Multiplication, Pence, and Time Tables. To be able to work easy questions in Simple Multiplication, and Simple Short Division. To distinguish readily, in any easy sentence selected in their daily Lessons, the Article, Noun, Personal Pronoun, Adjective, Verb, and Adverb. To know the Map of the World. To write on Paper. To write out from memory any part of the Multiplication Table. To write out from memory, in proper order, the names of the Months of the Year, with the number of Days in each. To spell correctly the simpler words of the Lessons they may have already read, and to understand their meaning. To answer simple questions on the subjects of the Lessons already learnt by them. To read with a fair degree of ease and correctness.

Third Class.—Children enrolled one Quarter or more in the Third Class will be expected—To know Notation and Numeration well, and to repeat all the more useful Arithmetical Tables. To work readily questions in the Simple and Compound Rules of Arithmetic. To distinguish readily and with certainty, in any easy sentence selected in their daily Lessons, all the Parts of Speech. To know the Maps of the World and Europe. To write on Paper, and to write a fair hand. To know and to be able to write down the Characters or Marks used in Punctuation. To write down correctly easy sentences from Dictation. To write out from memory the Time and Money Tables. To spell correctly the words of the Lessons they may have already learnt, and to explain their meaning. To answer simple questions on the subject-matter of those Lessons, and to repeat such of them as are in rhyme neatly and correctly. To know what is meant by Accent and Emphasis, and to read with ease and correctness, and with due attention to the pauses.

Fourth Class.—Pupils enrolled one Quarter or more in the Fourth Class will be expected—To know *all* the Arithmetical Tables, and to be able to write out from memory, and in a neat and correct form, any one of them. To be able to work sums in Proportion, Fractions, and Practice. To know the Prefixes, Affixes, and principal Roots given in the Fourth Book. To know so much of English Grammar as to be able to parse easy sentences. To know the Maps of *all* the Continents and of Ireland. To know the definitions of the more common technical terms of Geography, as *Axis, Poles, Equator, Latitude, Longitude, Zones,* &c., and to explain the ordinary proofs of the Earth's Sphericity. To write correctly from dictation *any* sentence selected from Third Book. To draw on a slate any of the simple plane Geometrical Forms. To answer readily on the subject-matter of the Lessons they may have already read, and to explain with clearness the meaning of the words contained in them. To write a good hand. To read with fluency and correctness.

Fifth Class.—Pupils enrolled one Quarter or more in the Fifth Class will be expected—To know the Commercial Rules of Arithmetic, and the Mensuration of Superficies. To know how to keep Cash, Personal, Real, and Farm Accounts, and how to write out Bills, Shop Accounts, &c. To analyse and parse correctly Complex Sentences. To know the Geography of the British Empire, and the *simpler* portions of the Geography Generalized. To write correctly from dictation any ordinary sentences selected for them. To write out from memory, with correct spelling and syntax, the substance of any fable or short story chosen from the Second or Third Book. To know the forms of Epistolary Correspondence, and how to Address, Subscribe, and Direct Letters, &c. To analyse the words of their ordinary Lessons, pointing out their Roots, Prefixes, and Affixes, and to explain their meaning with clearness and precision. To answer with intelligence and judgment on the subject-matter of the Lessons already learnt by them. To write a good hand with ease and freedom. To read with entire ease, fluency, and judgment, both poetry and prose.

NOTE I.—The *Spelling Book Superseded* should be taught to III., IV., & V. Classes. NOTE II.—Mental Calculation should be taught to the same Classes. NOTE III.—The "*Knowledge of Common Things*" is to be learnt from the Lesson Books; and the Classes should be regularly and carefully examined upon the *subject-matter* of the Lessons read by them. NOTE IV.—*Periodic Repetitions* should be regularly instituted, the three great means of instruction being EXPLANATION, INTERROGATION, and REPETITION.

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	Income, &c., of Teacher.																			
	mount hool fees ceived ing the year.		Local contributions, not School Fees.			Salary from Board.			Value of dwelling, or land, if any, rent free.			Total Income from School during the year.			Age.	Trained, or not.	Class.	General Character of School.
	s.	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*				
Ca	0	0		–		20	0	0		–		28	0	0	45	Not,	2^2,	Tolerable.
Ma	0	0		–		18	0	0		–		23	0	0	26	Yes,	3^1,	Middling.
	0	0	10	0	0	22	0	0		–		37	0	0	25	Yes,	2^1,	Tolerable.
	0	0		–		22	0	0		–		32	0	0	28	Yes,	2^1,	Fair.
	10	0		–		18	0	0		–		19	10	0	27	Not,	3^1,	Fair.
	0	0		–		18	0	0		–		26	0	0	22	Yes,	3^1,	Middling.
	0	0		–		20	0	0		–		28	0	0	24	Yes,	2^2,	Middling.
	18	9		–		22	0	0		–		29	18	9	27	Yes,	2^1,	Tolerable.
	0	0		–		18	0	0		–		23	0	0	21	Yes,	3^1,	Middling.
Do	0	0	6	0	0	22	0	0		–		44	0	0	48	Not,	2^1,	Tolerable.
	0	0		–		15	0	0		–		25	0	0	21	Not,	3^2,	Fair.
	0	0		–		18	0	0		–		30	0	0	45	Not,	3^1,	Fair.
	–			–		11	0	0		–		11	0	0	19	Not,	Pro.	Middling.
	0	0		–		18	0	0		–		34	0	0	27	Yes,	3^1,	Middling.
	0	0		–		6	0	0		–		21	0	0	23	Yes,	3^2,	Tolerable.
	0	0		–		18	0	0		–		28	0	0	29	Yes,	3^1,	Tolerable
	0	0		–		11	0	0		–		17	0	0	19	Not,	Pro.	Middling.
	–			Not ascertained.						Teacher in training								Fair.
	0	0		–		18	0	0		–		24	0	0	43	Not,	3^1,	Tolerable.
	0	0		–		11	0	0		–		17	0	0	23	Not,	Pro.	Tolerable.
	0	0		–		20	0	0		–		34	0	0	46	Yes,	2^2,	Fair.
	0	0		–		15	0	0		–		20	0	0	20	Not,	3^2,	Tolerable.
	0	0		–		15	0	0		–		23	0	0	55	Not,	3^2,	Tolerable.
	0	0		–		11	0	0		–		17	0	0	18	Not,	Pro.	Tolerable.

Income, &c., of Teacher.																		
Amount f School fees received during the year.			Local contributions, not School Fees.			Salary from Board.			Value of dwelling, or land, if any, rent free.			Total Income from School during the year.			Age.	Trained, or not.	Class.	General Character of School.
£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.				
10	0	0		–		15	0	0		–		25	0	0	19	Not,	3^2,	Tolerable.
4	0	0		–		15	0	0	4	0	0	23	0	0	34	Not,	3^1,	Fair.
5	0	0		–		11	0	0		–		16	0	0	26	Not,	Pro.	Fair.
10	0	0		–		20	0	0		–		30	0	0	34	Yes,	2^2,	Fair.
2	0	0	2	0	0	18	0	0		–		22	0	0	24	Yes,	3^1,	Middling.
	–			Not ascertained.						Teacher in Training.								
3	0	0		–		20	0	0		–		23	0	0	38	Not,	2^2,	Very poor.
6	0	0	2	0	0	18	0	0		–		26	0	0	19	Yes,	3^1.	Middling.
9	0	0		–		20	0	0		–		29	0	0	63	Not,	2^2,	Fair.
5	0	0		–		20	0	0		–		25	0	0	44	Yes,	2^2,	Tolerable.
8	0	0		–		18	0	0		–		26	0	0	34	Yes,	3^1,	Fair.
10	0	0		–		22	0	0		–		62	0	0	33	Not,	2^1,	Good.
12	0	0		–		20	0	0		–		32	0	0	36	Yes,	2^2,	Tolerable.
14	0	0	8	0	0	18	0	0		–		40	0	0	22	Yes,	3^1,	Fair.
4	0	0		–		20	0	0		–		24	0	0	23	Yes,	2^2,	Fair.
9	0	0		–		25	0	0		–		34	0	0	29	Yes,	1^3,	Fair.
5	0	0		–		15	0	0	3	0	0	23	0	0	25	Yes,	3^1,	Fair.
2	0	0		–		13	0	0		–		15	0	0	22	Not,	3^2,	Middling.
9	0	0		–		16	0	0		–		25	0	0	25	Yes,	2^2,	Fair.
7	0	0		–		13	0	0		–		20	0	0	18	Not,	3^2,	Fair.
5	0	0		–		10	0	0		–		15	0	0	19	Not,	Pro.	P. Good.
21	0	0		–		17	0	0		–		38	0	0	36	Not,	2^1,	Fair.
12	0	0	8	0	0	22	0	0		–		42	0	0	24	Yes,	1^2,	Good.
6	0	0		–		10	0	0		–		16	0	0	25	Not,	Pro	Tolerable.
4	0	0		–		17	0	0		–		21	0	0	25	Yes,	2^1,	Good.
6	0	0		–		17	0	0		–		23	0	0	18	Not,	2^1,	Good.

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Appendix I.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

APPENDIX I.

I.—Report on Agricultural Schools, for the year 1854, by Dr. Kirkpatrick, Inspector of National Agricultural Schools.

Albert National Agricultural Training Institution,
Glasnevin.

Gentlemen,—In submitting the following as my Report on the Agricultural department of the system of National Education in Ireland, (for the year 1854), I feel great pleasure in being able to state that there has been a steady and highly gratifying progress in the number and efficiency of the Agricultural Schools, since the date of my last Report.

The following Table shows the number of Agricultural National Schools in the year 1852, 1853, and 1854:—

Table showing the Number of Agricultural National Schools in the Years 1852, 1853, and 1854.

Year.	Number of Agricultural National Schools in each Year.				
	Model.	Ordinary.	School Gardens.	Workhouse.	Total.
1852, . .	27	39	3	23	92
1853, .	33	43	3	50	129
1854, . .	35	47	3	70	155

From the foregoing table it will be seen that there has been an increase on the year of twenty-six Agricultural Schools.

The following summary exhibits the numbers of Agricultural Schools in each county, on the 31st December, 1854, and the class to which they belong:—

	Counties.	Agricultural Schools.				
		Model.	Ordinary.	School Gardens.	Work-house.	Total.
1	Antrim, ...	3	3	.	6	12
2	Armagh, ...	1	1	.	.	2
3	Cavan, ...	1	2	.	.	3
4	Donegal, . . .	2	5	.	.	7
5	Down, ...	.	.	.	2	2
6	Fermanagh, . . .	1	.	.	.	1
7	Londonderry, . .	.	2	.	2	4
8	Monaghan, . . .	2	1	.	4	7
9	Tyrone, . . .	1	4	.	1	6
	Total in Ulster, .	11	18	.	15	44
10	Clare, ...	3	3	.	4	10
11	Cork, ...	4	2	.	8	14
12	Kerry, ...	.	.	.	3	3
13	Limerick, . . .	3	1	.	2	6
14	Tipperary, . . .	3	.	.	7	10
15	Waterford, . . .	1	1	.	3	5
	Total in Munster, .	14	7	.	27	48

[*Continued.*

	Counties.	Agricultural Schools.				
		Model.	Ordinary.	School Gardens.	Work-house.	Total.
16	Carlow,	.	1	.	.	1
17	Dublin,	1	.	2	3	6
18	Kildare,	1	2	.	2	5
19	Kilkenny,	2	3	.	2	7
20	King's,	1	.	.	1	2
21	Louth,	1	.	.	.	1
22	Longford,	.	.	.	1	1
23	Meath,	.	3	.	5	8
24	Queen's,	.	.	.	1	1
25	Westmeath,	.	3	.	.	3
26	Wexford,	.	.	.	2	2
27	Wicklow,	.	1	.	.	1
	Total in Leinster,	6	13	2	17	38
28	Galway,	3	2	.	4	9
29	Leitrim,	1	.	.	1	2
30	Mayo,	.	2	.	5	7
31	Roscommon,	.	3	1	1	5
32	Sligo,	.	2	.	.	2
	Total in Connaught,	4	9	1	11	25
	Grand Total,	35	47	3	70	155

Tabular Returns of the Model National Agricultural Schools, in connexion with the Board, on the 31st December, 1854:—

I.—MODEL AGRICULTURAL NATIONAL SCHOOLS under the exclusive management of the Commissioners.

County.	In full operation.	In partial operation.	Building.
Antrim,	.	Ballymoney,	.
Cavan,	Bailieboro',	.	.
Donegal,	.	.	Templedouglas.
Monaghan,	Bath,	.	.
Cork,	Dunmanway,	.	.
"	Glandore,	.	.
"	Farrahy,	.	.
"	.	Munster,	.
Limerick,	Tervoe,	.	.
"	Mt. Trenchard,	.	.
"	.	Limerick,	.
Tipperary,	Kyle Park,	.	.
"	Derrycastle,	.	.
"	Gormanstown,	.	.
Dublin,	Albert (Glasnevin),	.	.
Kildare,	Athy,	.	.
Kilkenny,	Woodstock,	.	.
"	.	.	Kilkenny.
Leitrim,	Leitrim,	.	.
	Total, 14.	Total, 3.	Total, 2.

II.—MODEL AGRICULTURAL NATIONAL SCHOOLS under the management of Local Patrons.

Counties.	In full operation.	In partial operation.	Building.
Antrim,	Larne,	.	.
Armagh,	Markethill,	.	.
Donegal,	.	.	Dunlewey.
Fermanagh,	Carrick,	.	.
Monaghan,	Drumhilla,	.	.
Tyrone,	Loughash,	.	.
Clare,	Sallybank,	.	.
,,	Belvoir,	.	.
,,	Cahersherkin,	.	.
Waterford,	Gloungarragh,	.	.
King's,	Rahan,	.	.
Louth,	Dromiskin,	.	.
Galway,	Loughrea,	.	.
,,	Ballinakill,	.	.
,,	Castlehacket,	.	.
	Total, 14.		Total, 1.

Albert National Agricultural Training Institution.—As the Albert Institution, to use the words of Lord Monteagle, is the "*fons et origo*" of the system, and as it has engrossed much of my attention during the past year, I think it incumbent on me to bring it prominently before you in this Report; and I think I cannot more satisfactorily show you its efficiency, and the extent to which its working has secured public confidence, than by laying before you a few extracts from the opinions of persons distinguished by their scientific and practical attainments, and who have minutely examined it during the past year:—

"Visited the Establishment in company with my friends, Mr. Macdonnell and Dr. Kirkpatrick, and felt the most unqualified delight in observing in its progress and present state, the full realization of the most sanguine hopes of those who are interested in this great branch of Irish education connected with the improvement of land. Considering the system as a whole, from the Albert Model Farm down to the four-acre lot at an ordinary National School, and through the intermediate degrees of model farms, district schools, and workhouse training, an impulse is given, which, if duly followed up by the owners of land in Ireland, and the intelligence of the farming classes, is likely to produce incalculable improvement in the country. It cannot be doubted that the order, regularity, cleanliness, and good habits observed, all contribute to improve the moral and social habits of our people, and remove apathy to the improved culture of the soil.

"MONTEAGLE."

"I have derived much pleasure and instruction from all that I have seen at this Institution; and I regret that time does not permit me to examine more particularly the general arrangements and machinery of the establishment. I was pleased to see that every thing is done to promote the proper comforts of the pupils, and to give them useful habits in after life.

"WILLIAM SHARMAN CRAWFORD."

"I had the pleasure of listening to an examination on various subjects in the science of Agriculture, and was much gratified by the intelligence displayed in the answers of the pupils, and with the clearness of exposition on the part of the teachers.

LYON PLAYFAIR (London)."

APPENDIX I.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

"I have not been so much gratified by any exhibition which I have visited in Ireland, as by that which has come under my notice at the Albert Institution this day. The lessons are all of a most practical kind, and delivered so as that the least expansive mind may take them in. It seems to me that we must look here for the main source of the regeneration of this country.

"G. R. GLEIG."

"I have derived much pleasure from the inspection of the Buildings and Farm at Glasnevin, and of the admirable arrangements for the instruction of so large a body of promising young men, destined to diffuse through Ireland that scientific and practical knowledge of agriculture, which is so necessary to the advancement of the social and economical position of our rural population, still unfortunately, even in this enlightened age, enthralled by ignorance, and by obstinacy or indifference, of which ignorance is the parent.

"The testing of the value of the several breeds of cattle, and of the effects of the several articles of cattle food, and the accurate record of the results, must be eminently instructive and useful.

"Experiments, even when carried to the highest point of *high farming*, though in advance of our present position, and perhaps not applicable to the great body of Irish farmers, must be productive of information, and may prove useful to the highest class in the present generation, and lay the foundation of more extended practical application hereafter. In this branch of operations I would include the distribution of liquid manure by engine-power, through pipes, which I apprehend is at present only applicable to exceptional cases, such as Glasnevin, with its large extra supply of liquid from the lavatory, water closets, &c., which it might be impossible to absorb. I found it necessary on my own farm for the preservation of such matter, to construct a liquid manure tank. Nevertheless, I adhere to the opinion, that it is inexpedient to separate the solid and liquid excrements of cattle, the union of which is necessary to constitute a perfect manure.

"JOHN ANDREWS."

"I have examined the Buildings, Machinery, Implements, mode and means of instruction, and domestic arrangements of the Model Farm at Glasnevin, and have been deeply impressed with the national benefits which may result from such an excellent Institution so admirably conducted.

"DANIEL BLAIR, M.D.,
"Surgeon-General of British Guiana."

"I have this day visited this Establishment, and quite concur in the opinions expressed by previous visitors, as to the admirable manner in which every thing is conducted, and the great advantage the pupils must derive from the superior means of instruction placed at their disposal.

"KINNAIRD."

"We have this day visited this Establishment, and it gives us very great pleasure in stating our entire satisfaction at the manner in which every thing is conducted on the Model Farm, as also the extreme cleanliness, and evident comfort of the apartments, and the attention paid to the pupils.

"We have visited similar Institutions on the Continent, and we can truly testify to the great superiority, in every respect, of the Glasnevin Model Farm.

"JAMES O'HARA (Florence).
"ACHILLI BALDINI (Florence)."

"Inspected the Buildings and general internal arrangements, and am highly pleased with the principle on which the whole are constructed and employed. I consider a more scientific and correct knowledge of the *principles* of Farming can be obtained here, than elsewhere in the three kingdoms; and if a correct practice is combined with this teaching, the pupils must obtain a first-class knowledge of the business of their lives.

"THOMAS SCOTT,
"5, Charing Cross, London."

"We have visited the Model Farm, and have found every thing to exceed our expectations in each department, and have been greatly pleased with the attention shown to us.

"ARTHUR NUGENT.
"COLONEL CLOSE.
"MAJOR HALL.
"WILLIAM BROWNLOW, D.L. & J.P."

APPENDIX I.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

"We have been much pleased with what we have seen at Glasnevin, and gratified by the kind attention of Dr. Kirkpatrick.

"ALFRED HESKETH,
"Northleach, Gloucestershire.
"C. R. MOORSOM, jun.,
"Trin. Col. Cambridge, and Highfield, Birmingham."

In my last Report I was enabled to state that the Commissioners had increased the educational staff of the Albert Institution, and it now becomes my duty to report upon the new elements thus infused into the education afforded to the pupils. Mr. Moore, Superintendent of the Royal Dublin Society's Botanic Gardens, has completed his fourth sessional course of lectures on botany and vegetable physiology, in their application to practical husbandry. Whilst Mr. Moore explains the structure and functions of every organ of the plant, and traces its development from the sprouting of the seed to the ripening of the fruit, he also takes every possible occasion to point out the practical bearings of the theoretical principles which he expounds. He enters pretty fully into the natural system of classifying plants, and gives an extensive history of those natural orders which most concern the farmer, as the Graminaceæ and Cruciferæ. Mr. Moore also treats very fully on vegetable pathology, and particularly of the various diseases which affect the crops of the farm. From this it will be seen that Mr. Moore combines theory with practice,—expounding those principles of botanical science, which have an important bearing on agriculture and horticulture.

Before dismissing the subject of Mr. Moore's very valuable instructions, I must allude to an interesting feature in them, namely, botanical excursions. Of these, there have already been four, one of which I attended, and of which an interesting account is given in the sixth number of the "*Journal of the Albert National Agricultural Training Institution.*" The great importance of such excursions to the botanical student is generally admitted, but the principal object Mr. Moore had in view was to make the pupils practically acquainted with the herbage of our pasture lands, and with the important relations which subsist between this herbage, and the qualities and capabilities of the soil.

Professor Hodges, of the Queen's College, Belfast, has delivered two courses on animal physiology and pathology, in their relation to the treatment of the animals of the farm, in health and disease. The main feature in the lectures of this gentleman, as in those of Mr. Moore, is the combination of science and practice. Professor Hodges' extensive knowledge of several sciences, as well as his well known acquirements as a professor of agriculture, peculiarly qualify him for rendering essential service to agriculture, by his instructions to the pupils of this Institution. I have witnessed with great pleasure the zeal with which the pupils attended to Dr. Hodges' lectures, and I feel satisfied that they acquired much valuable information. I was told that lectures on veterinary medicine would be foreign to the objects of the Albert Institution, but I entertained the opinion—which is confirmed by experience—that (to use the words of the editor of the "*Veterinarian*") "the science of agriculture, and especially in all which relates to the breeding and rearing of farm animals, is so intimately united with the practice of veterinary medicine, that their disjunction would materially injure our national prosperity."

Like the two gentlemen to whose courses of lectures I have just alluded—Professor W. K. Sullivan's high reputation is the best guarantee I can give of the character of the lectures which he has

APPENDIX I.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

delivered on *chemistry* and *geology*, in their application to agriculture. The importance of lectures on these subjects has been so long and so universally admitted, that it is unnecessary for me to make many observations on the labours of this gentleman; I may, however, state that, in common with his colleagues, he has brought such an amount of zeal and talent to his task, as justifies me in stating, that his lectures have fully realized my expectations. He clearly elucidated the principles of the sciences, and explained their application to practice; and he took every opportunity of riveting the attention of the pupils on the means whereby they could be made to promote agricultural improvement. I attended Professor Hodges' lectures, and those also of Messrs. Sullivan and Moore, and I have much pleasure in stating, that they have confirmed the views I entertained when I suggested their adoption by the Commissioners.

Having made these general remarks on the nature of the instruction afforded by the additional lectures at the Albert Institution, I would now beg to make a few observations on the objects of these lectures, and I do so under the conviction that many persons—even some of those who are the friends and supporters of agricultural education—seem to entertain erroneous views on this point. When I suggested to the Commissioners of National Education the appointment of lecturers on the sciences above alluded to, I did not intend that the pupils should be made so learned as to cause them to forget nor overlook their real mission: I was desirous that they should receive a comprehensive and suitable education; but in doing so, I took care to insure that sound training in *every* practical operation should receive primary attention. Any one who reads the printed prospectus will see, that whilst the pupils receive as much theoretical or scientific instruction as will tend to make them skilful farmers, they are called upon to perform *every* description of farm work—from the most simple to the most complicated—thus combining "*practice with science.*" Lectures are delivered on botany and vegetable physiology, in order that the pupils may comprehend the phenomena of vegetable life, and be thus enabled to direct their practical operations in such a manner as will tend to the healthy growth and full development of the plants they cultivate. Instruction is given on the laws which govern the animal kingdom, in order that a knowledge of those laws may be made use of in preventing disease among the domesticated animals, and in their proper management both in health and disease. Their instruction in chemistry and geology directs them how best to improve and cultivate the soil, and apply suitable manures, all of which must eminently tend to the production of the largest amount of food for man and beast in the most economical manner.

Whilst every endeavour is made to ensure such a course of training of the pupils as will make them sound practical agriculturists, it is at the same time desired to make them *intelligent* men. I have much pleasure in directing attention to the following extract from the Rev. H. Moseley's report on male training schools:—

> "The trade school would well fill this vacant place. The trades and manufactures of the country would gain greatly; and the character of the operative, tradesman, and skilled workman would be greatly elevated, if each entered upon his trade having first made in such a school the study of that which belongs to the science of his trade. I am far from alleging that a knowledge of certain sciences is *necessary* for *carrying on* trades. But I do allege that many trades, if carried on in ignorance of certain branches of science, are carried on in ignorance of the *principles* on which they *rest;* and that whoever so carries them on misses that opportunity for the improvement of his mind which is supplied by the daily habit of reasoning on and understanding what he is about; that he fails of one

of the highest pleasures of which the human mind is capable—*that* of thus *reasoning* and *understanding*; and that he is wanting in *that* which is a legitimate source of moral dignity and self-respect. I allege further, that, taken collectively, such trades cannot but *suffer*, in a commercial point of view, from an ignorance, on the part of those who carry them on, of the principles on which they depend;—it being impossible but that new and improved processes of art and manufacture and expedients of construction should result from such knowledge."

The profession of the veterinarian is, I am happy to observe, rapidly gaining that respectable position which its importance demands. There are several veterinary schools and colleges in the United Kingdom, and some of our agricultural societies have their consulting veterinary practitioners—I may instance the useful labours of Professor Simmonds, in connexion with the Royal Agricultural Society of England. On the Continent of Europe, where agricultural education has long received the liberal support of the state, there are several flourishing veterinary schools. When on a visit to the French metropolis, no one of the many objects of attraction which I minutely examined, afforded me greater satisfaction than the Alfort Veterinary School—an Institution which is admirably arranged—adequately equipped, and conducted by gentlemen of the highest professional reputation in France.

It is not contemplated to make veterinary practitioners of the pupils at the Albert Institution; the great object of the course of instruction which is imparted is fully set forth in the following extract from an introductory lecture * delivered by Professor Hodges:—

"The inculcation of scientific principles to guide you in the business of your profession, and to enable you to overcome the idle prejudices and absurd notions which in no department of the farmer's occupation are more frequently found to prevail than in the treatment of the animals of the farm, will form an important part of my duties. Sound principles are as essential, and no less useful, to the young farmer than to the members of other professions; and in proportion as these are impressed upon your minds, will be the success of your exertions in your future career, and the credit—and this to a grateful disposition should not be without its influence—which this establishment, so fully supplied by a wise government with every means of affording instruction, will derive from your education. When the time arrives that you are to take your departure from this building, you will be supposed by the public to carry with you an amount of knowledge which will enable you, in the districts in which you may be placed, to direct those who may not have enjoyed opportunities of obtaining professional information. You must expect to be frequently encountered by ignorant opposition; but if, by your practice, you can show that you are fully instructed in the details of your business, and especially if you can detect the existence of disease, and skilfully apply the appropriate remedies, you will soon disarm your opponents, and secure the confidence of all classes in the community. Your knowledge will obtain for you a respectable position in society, and you will be enabled to stimulate the farmers around you to adopt improved modes of management, and thus, in the most effectual manner, give a worthy return to your country for the means which it has here provided for your education.

"I hope, that whilst I shall labour to direct my instructions to the practical purposes for which these studies are mainly intended to prepare you, I may also succeed in leading your minds to those views of creation which will enable you to recognise, in the structure of the animals of the farm, the expression of the design of an infinite all-wise Author, and thus contribute to render our investigations what such studies were described to be by the Roman philosopher,—'a hymn in honour of the Deity.'"

I confidently hope that no one who carefully and dispassionately considers the foregoing statement, and who takes the trouble of inquiring into the working of the Albert Institution, will conclude that too much attention is paid to theory, and that practice is neglected.

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* Vide "Journal of the Albert National Agricultural Training Institution," No. 8.

This leads me to notice another feature in the establishment, which, I regret to find, has given rise to erroneous notions—I allude to the erection of a conservatory and vinery. Since the first establishment of the Institution, a large kitchen-garden has been cultivated by the pupils, in their regular turn, under the superintendence and direction of an experienced practical gardener, and I feel perfectly satisfied that the extension of horticultural instruction, which has been decided upon by the Commissioners, is, on many grounds, highly desirable, and indeed necessary. Every day's experience shows clearly that those persons who are competent to discharge the *combined* duties of land stewards and gardeners will be most likely to obtain appointments. There have been numerous applications for persons possessing those qualifications, and it is therefore a matter of great importance to be enabled to meet this growing demand. It is said that too much is attempted; but I would submit that the Commissioners are only laudably endeavouring to meet the wants of the public, and at the same time raising the condition of intelligent, properly educated, and deserving young men. It is quite true that no young man can in the course of two years become a good gardener; and it is no less true that many private establishments present a wider field for instruction than that of the Board does. But whilst it is equally clear that no person can become a thoroughly qualified agriculturist in the space of two years' training, yet it ought to be borne in mind, that nearly all of the pupils have been accustomed from infancy to farming operations, and have undergone a preparatory training in some of the National Agricultural Schools. In like manner, the young men who are likely to be recommended to fill the situations of steward and gardeners, will be those who have had the advantage of some practical training in some private establishment previous to their becoming pupils at the Albert Institution. It will be the object of this establishment to give, as it were, a finish to their training—to impart a sound English education, to teach them the principles of their profession, and to instruct them in the mode of keeping a careful and accurate record of their proceedings.

There are generally at this establishment several young men who, previous to their entrance, have been engaged for some time in gardening pursuits; and it is very desirable that a larger number of such persons should be admitted, as there can be no doubt that with the knowledge which they possess at their entrance, combined with the valuable and comprehensive course of education afforded at the Institution, and the equally useful practical training they undergo, no class of persons would be more likely to spread throughout this country improved farm and garden management.

It is unnecessary to remark that the great majority of the agricultural pupils at the Albert Institution are the sons of small farmers of this country, and that many of them will return to their homes, to employ the knowledge gained by them at Glasnevin, in the culture and management of their parents' small holdings; it is therefore of paramount importance that their training should, as far as practicable, have a special bearing upon their future destination in life. With this view it has been proposed to have a small-sized farm cultivated, stocked, and managed, as a model for their instruction and benefit, and I am glad to say that a portion of the Albert Farm, containing about twenty statute acres, is now allocated for this desirable purpose. The land set apart for this object immediately adjoins the old farm offices, which were erected when the Glasnevin farm was at first established, and which, with their fixtures, are admirably suited for the purpose, without requiring any additional expenditure.

This arrangement, when completed, which it will immediately be, will form two distinct farms in connexion with the Albert Institution; first, a small farm of twenty acres, managed so as to supply an example to those young men destined to be the holders and cultivators of farms of a similar area—and secondly, the primary and larger farm of 160 acres, on which every description of farming, with the appliances of the most improved farm machinery, will be illustrated, so as to qualify a class of the pupils for acting in the capacity of land stewards, or as farmers on a large scale. On the former such appliances only as would be within the reach of farmers holding about the same extent of land will be had recourse to—the implements and machinery will be of a suitable description, and the pecuniary transactions of this as of the large farm will be recorded with the utmost accuracy, and annual balance sheets submitted to the Commissioners and the public.

I anticipate that some persons may say that the Model Agricultural Schools established in different parts of the country, and having farms of a similar size attached to them, should render the establishment of a separate one at Glasnevin unnecessary: but to this I would reply, that many opportunities are afforded to young men at Glasnevin for perfecting their professional education, which are not, and indeed could not be available at the other schools. In the first place, they have the privilege of attending a series of four courses of lectures by gentlemen of very high professional standing; and secondly, they have the advantage of taking part in the working not only of the small but also of the large model farm, so that if by skill and industry they should in after life raise themselves to the rank of large farmers, they will be acquainted with their duties in that extended sphere.

It has been often remarked, that while the young men trained at Glasnevin are made well acquainted with the most approved modes of cultivation, they have had but limited experience in that important department of a farmer's occupation—the sale and purchase of live stock. To supply this defect, in the system of training pursued at the Albert Institution, arrangements are in progress whereby the pupils will in future be enabled to attend weekly, in rotation, the Dublin market, under the direction of a respectable salesman. I need scarcely remark, that the metropolitan market affords an excellent opportunity for gaining a knowledge of the transactions attendant upon the buying and selling of every description of live stock, as well as for studying the characteristics, and good and bad points of a large number of animals of every class.

In accordance with the arrangements to which I have just referred, it is intended that a certain number of the pupils shall, in their turn, go to Smithfield market every Thursday, accompanied either by the agriculturist or one of the monitors, to receive practical lessons in marketing from a skilful salesman. They will thus see reduced to actual practice the principles laid down in the lectures delivered at the Institution, and by the authors whose works they may have studied.

This arrangement, together with the experience derived from the care and management of the different breeds of cattle, sheep, and swine, which will be kept on the Model Farm, will be well calculated to afford extensive and valuable practical knowledge to pupils desirous of acquiring a thorough acquaintance with this very important branch of their profession.

Workhouse Agricultural National Schools.—The number of this class of schools taken into connexion during the year is considerable, and there are still some applicant cases which have not yet been visited and reported upon.

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I. Report on Agricultural Schools.

Dr. Kirkpatrick.

The following Table shows the number of Workhouse Agricultural Schools in the years 1853 and 1854:—

	County.	No. in operation on 31st December, 1853.	No. in operation on 31st December, 1854.	Increase.	Decrease.
1	Antrim,	6	6	.	.
2	Down,	2	2	.	.
3	Londonderry,	2	2	.	.
4	Monaghan,	3	4	1	.
5	Tyrone,	.	1	1	.
	Total in Ulster,	13	15	2	.
6	Clare,	1	4	3	.
7	Cork,	5	8	3	.
8	Kerry,	3	3	.	.
9	Limerick,	3	2	.	1
10	Tipperary,	7	7	.	.
11	Waterford,	2	3	1	.
	Total in Munster,	21	27	7	1
12	Dublin,	2	3	1	.
13	Kildare,	2	2	.	.
14	Kilkenny,	3	2	.	1
15	King's,	1	1	.	.
16	Longford,	.	1	1	.
17	Meath,	.	5	5	.
18	Queen's,	1	1	.	.
19	Wexford,	1	2	1	.
	Total in Leinster,	10	17	8	1
20	Galway,	2	4	2	.
21	Leitrim,	.	1	1	.
22	Mayo,	3	5	2	.
23	Roscommon,	1	1	.	.
	Total in Connaught,	6	11	5	.
	Grand Total,	50	70	22	2

In my last Report I pointed out several obstacles to the efficient working of this class of Agricultural Schools. I stated that one of the greatest obstacles was the circumstance of the industrial training of the boys being, in many instances, intrusted to persons quite incompetent for the important task. The influence which the proper industrial training of the young inmates of our workhouses may exert on the future welfare of this country is of vital moment. I hold that the employment of an *efficient* class of teachers in the Workhouse Schools, demands the serious attention of the Poor Law Commissioners and Boards of Guardians. I know no class of men who require more peculiar traits of character and special qualifications than the agriculturists or teachers who undertake the management of a Workhouse farm, and the teaching and training of the boys in agricultural pursuits. It appears to me to be very false economy on the part of the Guardians to intrust those important duties to old, infirm, and incompetent persons.

In making these remarks, I feel called upon to testify to the anxious desire evinced by the Poor Law Commissioners for the carrying out of an efficient system of industrial training in the several Workhouses, and to their valuable services in promoting the cause of agricultural education in Ireland; but unfortunately the Boards of Guardians, in many instances, do not offer sufficient remuneration to induce competent persons to undertake the important, but laborious duties of agricultural teachers.

A large number of the Workhouse Schools, in connexion with the Board of National Education, have already an agricultural department annexed to them, and I hope there will soon be a large increase to the number, for, to use the words of one of the Board's able Head Inspectors—Mr. Kavanagh—"In no branch connected with elementary education can intelligence be better developed, than in the variety of interesting though *common things* relating to farming." *

In my recent examination before the Select Committee of the House of Lords, appointed to inquire into the practical working of the system of National Education in Ireland, the subject of the industrial training of pauper boys was fully inquired into, and I now beg to submit the following extract from my evidence, which I think will be read with interest:—

"9654. Lord MONTEAGLE of Brandon.—Have you been able to observe any beneficial consequences in those workhouse schools arising from the introduction of agricultural labour among the paupers?—Yes; the amount of good is very great indeed.

"9655. Viscount CLANCARTY.—Do you find that there has been a demand arising for the labour of the persons who have been trained in those workhouse schools, and that the result is very gratifying in that respect?—Yes.

"9656. Have you had testimony to that effect?—Yes; since I came to London I have received a very interesting letter bearing upon that point; it is from the Rev. Robert Park, Presbyterian clergyman in Ballymoney, in the county of Antrim; it is dated June the 23rd, 1854. 'My dear Sir,—Some years since, the Rev. Dr. Begg, of Edinburgh, visited with me the poor law union workhouse in this town; he was struck particularly with the arrangements for the instruction of the boys in trades, and for their training in agricultural pursuits. When last I met him in Scotland, he inquired as to the success of the experiment, and it gratified me much to be able to report favourably. Aware of your deep interest in these arrangements, especially with relation to agriculture, I beg to mention some of the grounds upon which that report was given, confining myself to the department with which you are concerned. The first and obvious is, profit to the union. You are aware that the farm connected with the workhouse here is very limited, extending only to thirteen statute acres; nearly the whole of the work in its cultivation is done by the boys, aided by a few infirm old men; there is not a single able-bodied pauper in the house. These boys were during the last year, 13; their average age, 11 years. Yet I find from the 'Ballymoney workhouse farm account, from the 25th of March, 1853, till the 25th of March, 1854,' that the balance in favour of the union is £144 2*s.* 8*d.*; I know that this large sum is due mainly to the excellent system of cropping pursued by the master of the workhouse, and to his judicious management of the stock and farm produce, for which, by the way, a handsome gratuity was awarded him last year by your Board; but without labour this system could not have been carried out; and of this labour the greater part was by boys, who under different circumstances might have been a charge upon the public, and a curse to society. The boys themselves are much benefited in their health. I have no hesitation in saying that the open-air exercise on the farm is a corrective of the injury to the constitution from the confinement necessarily consequent upon the workhouse system. The more robust appearance of the boys so employed, compared with girls of the same age, who are more within doors, strikes every eye. But this health is not obtained at the expense of their literary progress. The boys employed on the farm are obliged to attend school three hours each day. They are there taught the elements of a useful education, and receive occasionally, through the excellent publications of the National Board, lessons on the science and practice of agriculture. The alternation of farm labour and school business prevents the mind and body from being too much fatigued by either employment, and prepares them to receive greater advantages from both. Their useful preparation

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* Report on Workhouse and Prison Schools.—1853.

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for afterlife is not to be overlooked. I have often admired the expertness of the boys in the use of their implements; their quickness to receive, and their readiness to carry out directions in farm business; their anxiety to make themselves useful in the different departments of field labour, and their efficiency in its general employment. These must tell favourably on their position in more mature years. The result of an experiment of last year has gratified me exceedingly. A small portion of ground was allotted to each boy, which he was to cultivate, crop, weed and manure, being supplied of course with the necessary seeds and manure. It was to be a voluntary exercise; a small sum which you were kind enough to appropriate as rewards for the most efficient management. being the only pecuniary inducement. The boys have been taught something of personal independence and of self-reliance, have been stimulated to diligent persevering exertion, and have been encouraged in friendly rivalry, to excel in what must be useful in afterlife; whilst a moral advantage has followed. Instead of their leisure time being devoted to idleness, and its necessary facilities for evil, it has been employed in the formation of habits, whose influence may tell upon many succeeding generations. There has been some advantage to the farming class in the district. I do not ascribe altogether to their training, that the workhouse boys have been, and still are, anxiously sought after as farm servants. Labour is at present hard to be obtained, and from every quarter is the supply sought; but I have no doubt this preparation commends them to many, and awakens greater anxiety to obtain their services; and so far, I believe, they have given satisfaction to those by whom they have been engaged. I do anticipate still greater beneficial results, when the agricultural model school in progress of erection, and whose grounds adjoin the workhouse farm, is in operation. Upon the whole, I would be delighted were the system of agricultural training, which is carried out in the workhouse, extended to the children of our small farmers generally. Whilst I remark some progress in the management of their holdings, there is still much required to raise our district to a level with other portions of the empire. As confirmatory of the views I have above referred to, I take leave to add a copy of the report of one of your agricultural sub-inspectors, given this day:—'The management of the Ballymoney workhouse farm, for system and efficiency, is almost beyond praise; and to any person feeling an interest in the welfare and industrial progress of this country, an examination of it would afford unmixed satisfaction. The boys, thirteen in number, whom I examined in the agricultural class, evince a very fair amount of improvement, considering their age and literary attainments, and they seem perfectly to understand the routine of management in which they are required to assist, and the value of the excellent industrial training they receive.'

"'To Dr. Kirkpatrick, &c., &c.'"

Model and Ordinary National Agricultural Schools.—As no material change has been made in the general organization of the Agricultural Schools since my last Report, I need only observe that they continue to be conducted with the same care and efficiency, and in general with very gratifying results, as the annexed reports of the agriculturists and teachers will show. A very important feature in the proceedings of the Board's agriculturists, and to which I have referred in former Reports, is the instituting of experiments for testing any new practices that may suggest themselves, or for obtaining useful statistical data in reference to various branches of husbandry. Numerous experiments have been instituted during the past year at several of the school farms, among which I may allude particularly to those conducted by the agriculturist at the Munster model farm, and which will be found in the Appendix to this Report. I am well aware that the Board's agriculturists, and agricultural teachers, have onerous and responsible duties to perform, but it is with pleasure that I can testify to the alacrity and correctness with which they endeavour to discharge the additional task of conducting experiments, no matter how complicated. It is also gratifying to me to be able to speak in flattering terms of the excellent moral conduct and efficiency of the Board's agriculturists.

I am of opinion that no department of natural science deserves greater attention than that embraced under the term meteorology. The practices of different countries, and of different portions of even a limited tract of country, are affected by atmospheric phenomena. It was remarked by the late and much lamented P. Pusey, Esq., that a man who could farm successfully in the humid districts of Scotland, might prove an unsuccessful farmer in the dry districts of Eastern England, and the same may be said of different portions of this island. To any one who has given attention to this subject, institutions supported either by the State or by scientific societies, will at once suggest themselves as the legitimate places at which arrangements should be made for collecting the necessary data, so as to arrive at correct conclusions in meteorology. It appears to me that the erection of a few instruments at some of the Agricultural National Schools in various parts of Ireland, and at different elevations, for ascertaining the humidity of the climate—the variation of temperature, &c., during the different months of the year, is an object which comes within the province of the Board's Agricultural Institutions, and in doing which they might render some service to the science of agriculture. Impressed with these convictions, I waited upon that distinguished philosopher, Dr. Lloyd, whose invaluable labours in this important field of scientific investigation are so well known—and he was of opinion that a large amount of useful information might be collected in the way I sketched out, but, that unless those who superintended the observations were most trustworthy and zealous, the scheme would prove abortive. I feel myself that the task would require much patience and industry; but the intelligence and respectability of the Board's agriculturists give me more than ordinary confidence in the success of the entire scheme, which, I trust and believe, will be sanctioned by the Commissioners of National Education. And it is to me peculiarly gratifying, that I can adduce in support of the views which I entertain on this important subject, the opinion of one so eminently qualified to judge as Lord Monteagle. The following is an extract from a recent letter from his Lordship:—"I observed with infinite satisfaction, that the principle has been adopted in the Commissioners unrivalled establishment at Glasnevin, visited by me during my late stay in Dublin. I allude to the public benefit as well as intellectual improvement that would attend making the Agricultural Schools, where the accuracy of the masters can be relied on, places of physical observation. If a good barometer, thermometer, and rain-gauge, were placed at the schools, subject to *my* observation respecting the qualification of the masters,—if a daily register were kept,—if, in addition, the master and the pupils were encouraged to collect the specimens of the minerals and fossils in their vicinage,—if a few of the Ordnance survey sheets, mounted on rollers, were deposited in the school or lecture rooms, showing the local stratifications, and the nature of the soils, I have no doubt that much valuable knowledge would be obtained, but a still further benefit would be secured, and the pupils would be taught *how to observe*, and how to apply the knowledge given them in their classes."

School Gardens.—There is no feature in the system of industrial education more interesting than school allotment gardens, and I know of no more successful example of this class of schools than the National Industrial School in the village of Glasnevin. The allotment garden in connexion with the Pilltown Model National Agricultural School, which receives the kind and fostering care of Lady Bessborough, is well managed; and the teacher of the Loughglynn National School, by his school instructions, and weekly perambulations, in directing the culture, and inspecting the management of the "*Home Gardens,*" which are patronized and thoroughly encouraged by Mr. and Mrs. Strickland, is diffusing a knowledge of *common things*, which will confer lasting benefits on the community

APPENDIX I.

I. Report on Agricultural Schools.

Dr. Kirkpatrick.

The importance of these "school and allotment gardens," is recognised in England by Her Majesty's Inspectors of schools, not only as a direct means of instruction and source of profit, but also as a means of protracting the period of the children's attendance at school. And it is most gratifying to perceive that Her Most Gracious Majesty and her Royal Consort, actuated by those enlightened and philanthropic feelings which adorn and dignify their exalted position, are munificent and unwearying patrons of a similar system at the Royal Schools in Windsor forest. The following account of these schools, which I have extracted from a recent address delivered at a public meeting by Sir J. K. Shuttleworth, will, no doubt, be read with much interest, and such acts of royal munificence and benevolence, as remarked by Sir James, "form a bright example to the community":—

> "He was some eight or nine years ago called on by her Majesty to organize for her and the Prince some schools in the royal forest of Windsor. The view the Queen took was, that a very large portion of the population resident in that district, being dependent on the Crown, were employed as labourers on the farms, or in the forests, or in the household duties connected with the royal farms, and soforth, and she had therefore a personal responsibility in their well-being. The people were scattered over the districts between one town and another, in which there were no schools or means of education, and the children were brought up in a half-wild manner, very much in the same condition as in remote portions of the country in the south of England. Her Majesty resolved that an efficient school should be established, and it seemed desirable that the school should be typical of the act of royal munificence which was about to be accomplished, and not only worthy of the Crown, but an example to the country at large. Her Majesty made no stipulation whatever as to the cost, and he drew out a scheme which involved an expenditure of £1,000 a-year. It provided for the instruction of the children, not merely in the ordinary secular and religious knowledge, but also supplied the best form of instruction in common things, such as in gardening, in household economy, cooking, washing, making up clothes, &c.; in preparing dishes suitable for, and otherwise enhancing the comfort of, cottagers, which latter were taught in kitchens and wash-houses prepared for the purpose. Her Majesty not only assented to this plan being carried out (and the place had been in operation during the last nine years), but she had promoted its success in every way, and all the linen worn by the royal children, and a very great part of that used in the royal apartments, was the work of this establishment. The Queen was in the habit of inspecting the place in person, and took a deep interest in its operations. The boys had a garden of several acres, in which they cultivated all that was necessary for cottage use. They had a plot which they jointly cultivated, and in addition they had small separate plots, which they cultivated upon the plan of the common cottage gardeners. They were employed also in workshops, but they were chiefly occupied in gardening. He could assure them that this establishment did not simply exist as a sort of outside show, but was a subject of personal interest to her Majesty; was regularly inspected by her, and often by the different visitors at the Court; and the Prince of Wales was in the habit of examining the scholars in certain branches of their studies."

It is to be regretted that there are so few of those allotment and school gardens in connexion with the agricultural department, whilst there are nearly three hundred National Schools having gardens attached, which might be successfully cultivated on the same principle, and which, if properly carried out, would confer material benefits on both teachers and pupils.

I would respectfully beg leave to direct the attention of the teachers of National Schools, and indeed of the public generally, to the following interesting article on "Gardens for Country Schools," from the pen of J. C. Morton, Esq., the able editor of the London "*Agricultural Gazette*":—

> "I refer to the uses of a garden or a plot of ground cultivated by the agricultural class in our schools—its uses not only as furnishing lessons in the practice, and illustrating doctrines in the theory of agriculture, and conferring bodily skill in the use of farm tools, but also as increasing the emoluments of the teacher or the funds of the school.

"The assertion which I make—that the theory and practice of cultivation can be efficiently illustrated in a garden—is proved by a number of well-known facts.

"Professor Daubeny's illustrations, in his lecture before the Royal Agricultural Society of England, of the power of successive crops of the same plant to exhaust the land off which they were continually reaped, were taken from garden plots. Tull's argument on the ability of the cultivator by careful pulverization of the soil and its exposure to the air, to balance in a great measure to his soil the want of manure, was originally built upon his observation of single plants and single garden rows, though no doubt it was afterwards corroborated by experiments in field culture. And the experiments of the Rev. S. Smith, of Lois Weedon, of the same kind, though extended over a small field, might well be prosecuted in a large garden, so as perfectly to illustrate his views. The most complete series of experiments on the relative value of the different grasses was conducted by Mr. Sinclair, gardener to the late Duke of Bedford, at Woburn, in the garden. And one of the most exact comparative inquiries into the relative merits of different varieties of wheat is reported in the first volume of the English Agricultural Society's Journal as having been conducted in a garden in Gloucestershire. Many an instructive and satisfactory experiment, illustrative of the relative value of manures, will be found recorded in our agricultural journals as having been performed in garden plots. I would especially refer to a most valuable and instructive annual report of his experience of this kind, which has been published in the *Gardeners' Chronicle and Agricultural Gazette* for many past years by the Hon. and Rev. L. Vernon Harcourt. Modes of cultivation, methods of manuring, rotations of cropping, and the merits of the various crops—all these particulars, which among them pretty nearly complete the circle of the mere cultivator's experience—all of them are capable of perfect illustration in the garden. And how perfectly the rationale of any particular observation can thus be obviously presented to the eye and mind any one can perceive. You may talk to a boy for any length of time on the advantage of stirring the soil and of deep cultivation, inasmuch as it admits the air more perfectly throughout the substance of the soil, and thereby facilitates those chemical processes by which the soil and its contents are fitted as the food of plants; but no quantity of merely verbal instruction will equal in its force, either upon the understanding or the memory, the lessons on that subject which that same boy would receive if, after having dug a hole in the hardened ground, he were told to put into it again the earth he had just taken out of it. The heap remaining over, which he could not replace, would represent more distinctly to him the bulk of additional air thus introduced into the soil by its disturbance than any argument unsupported by this simple experiment could do. Well, I need not say any thing more on this point. I hurry on to the usefulness of the garden, both as furnishing agricultural practice to the boys (I mean in the art of using the spade and hoe and other agricultural tools), and as adding to the emoluments of the schoolmaster. On these again I must be satisfied with a reference to the experience of others—in terms, too, so short as to be little more than an enumeration of the sources where information regarding it may be obtained. The Highland schools, under the committee of the General Assembly of the Church of Scotland, in which agricultural instruction has been introduced, have several acres of land attached to them; four to six acres is the usual extent; and a common report is in these terms in which the Elgin school is described:—'There are some acres of land attached which are farmed by the boys to the number of twenty-five; two hours a day, on an average, are allotted to work. They dig, trench, weed, manure, sow, &c., under the management of a superintendent, and are trained to the use of the spade and other agricultural implements with considerable address.' In Ireland, again, under the superintendence and inspection of Dr. Kirkpatrick, of Glasnevin, there are many agricultural schools in operation:—twenty-seven model schools in operation, five about to begin, forty-five ordinary agricultural schools in operation, and fifty workhouse agricultural schools; and from the experience of any of them there might be drawn facts enough to bear out Dr. Kirkpatrick's testimony that it is perfectly practicable and highly important to connect this agricultural with ordinary literary instruction in our country districts.

"Then, again, in England I can quote several instances:—First the schools on the plan of the late Mrs. Davies Gilbert, of Eastbourne, in Sussex, of which a full report will be found in a pamphlet by Mr. Cuthbert Johnson, published by Ridgway, 'On Increasing the Demand for Agricultural Labour.' These schools were said to be self-supporting—the children paying only 1*d*. a week, and receiving instruction during the morning of the day, and working during the afternoon; the land, four or five acres to each, was rented at a farmer's rent by the master of the school, who cultivated it by the aid of the boys.

"My second instance, and a most instructive one, is recorded in a pamphlet by Thomas Batson, of Colley House, near Exeter, entitled 'How to improve the Condition of the Agricultural Labourer,'—a self-supporting system by which boys may be trained in acts of industry, and at the same time receive a suitable education. This publication describes an experience of five years in the employment of boys on a farm, who for their labour received their maintenance and education, they and their parents finding this maintenance and education, both ordinary and agricultural, to be an ample return for their services, and Mr. Batson finding, as he proves in great detail, their services to be quite worth the expense he was at in lodging, clothing, feeding, and instructing them. Mr. Batson's pamphlet deserves to be widely known and read.

"My third instance is one of a class of similar cases—a reformatory, industrial, agricultural school, established and carried on at Hardwicke, near Gloucester, now for several years by the wise and painstaking benevolence of Mr. Bengough and Mr. Baker, two magistrates of the county of Gloucester.

"Fifteen boys work more than ten acres of stiff clay land, and their work goes a considerable way towards their support. The report and rules of the children's Friend Reformatory School, Hardwicke, Gloucestershire, dated January of last year, states the successful result hitherto of this experiment. I believe that any one who will read the report of the General Assembly's Committee on their Highland schools, the reports of Dr. Kirkpatrick on the Irish Agricultural schools, the report by Mr. Cuthbert Johnson of Mrs. Davies Gilbert's schools, by Mr. Batson of his experience on the subject at Kynaston, in Herefordshire, and the report of the Hardwicke Reformatory School, may confidently accept the conclusion I propose for his adoption, that in a large garden boys may receive efficient practice in the use of tools, and in the conducting of agricultural processes; and that from a large garden so managed a skilful schoolmaster will derive sufficient return to make it a very considerable source of income to himself or to the school. The great fact as proved especially in the Irish schools is that all these advantages are obtainable without interfering with the main purpose of the school—the communication of sound instruction in the elements of an ordinary education; and I contend that in Agricultural districts even these might usefully have an agricultural turn given to them—that reading books, for instance, might furnish lessons on agricultural subjects, and that lessons in arithmetic might have special reference, even from the beginning, to agricultural calculations, landing the pupil ultimately in questions of account and expense relating to all manner of farm methods and results, such as digging, and trenching, and hoeing, ploughing, grubbing, harrowing, rolling, drilling, horse-hoeing, manure-making and the application of it; sowing, whether by hand or by machine; mowing, reaping, and harvesting, measurement of land, manure, ricks, and building; estimation of produce, and all sorts of measure work connected with draining, embanking, fencing, planting, and building and road-making. I have lately had submitted to me a considerable quantity of MSS. by Mr. Ewart, of Newcastle, professing to be on agricultural arithmetic, which will probably be published by Messrs. Blackie, of Glasgow, and which appears very excellently adapted to the purpose of that kind of instruction to which I refer.—*J. C. Morton.*"

I regret being obliged to remark, that the long and unexpected delay which has occurred in the erection of the new offices at the Munster farm, and the completion of the alterations and additions at the Bath school buildings, has retarded the efficient working of these establishments; but I fondly hope that in my next Report I will be enabled to state that the works at these places, as well as those at Kilkenny and Templedouglas, are far advanced towards completion.

The works at the Limerick farm buildings are, I am glad to say, progressing most satisfactorily.

When the above named Agricultural Schools and Farms are brought into *full* operation, which, I hope, ere long they will be, I anticipate that an important impetus will be given to agricultural education and improvement in their different localities.

The recent extension of the school farms at Athy, Gormanstown, and Farrahy, have rendered it necessary to make additions to the farm offices—those at Athy are nearly completed, and I trust that the others will be at once proceeded with.

I have much pleasure in stating that the agriculturists in charge of the farms under the exclusive management of the Commissioners, evince much zeal and ability in the discharge of the important and responsible duties intrusted to them, and that the agricultural schools and farms generally continue to be conducted with care and efficiency.

APPENDIX I.

I. Report on Agricultural Schools.

The Kilwaughter Central Model Agricultural School, which, at one period, promised to give much satisfaction, has been struck off the list in consequence of Mr. Locke, the agricultural teacher, and holder of the farm having emigrated to America.

Dr. Kirkpatrick.

I cannot conclude this Report without adverting to the distinguished honour so graciously conferred on me by His Royal Highness Prince Albert, in presenting me with a beautiful silver tea service. The plate was accompanied by the following communication from the Hon. Colonel Phipps :—

"Buckingham Palace, May 7th, 1855.

"MY DEAR SIR,—The Prince has commanded me to forward to you a silver tea service, as a mark of his Royal Highness's appreciation of the care and attention you paid to the instruction of Pristo, and the kindness you showed him during the time he was under your charge.

"I have this day despatched the plate, of which His Royal Highness begs your acceptance.

"Sincerely yours,
"C. B. PHIPPS.

"Dr. Kirkpatrick."

I trust I shall ever remember with becoming gratitude this mark of royal favour, and appreciate it as a signal proof of the kind interest felt by His Royal Highness in the welfare of an Institution over which I have had the honor of being placed by the Commissioners of National Education.

I am, Gentlemen, your obedient servant,
THOMAS KIRKPATRICK.

To the Secretaries,
Education Office, Marlborough-street, Dublin.

APPENDIX. 1.—STATISTICS OF AGRICULTURAL SCHOOLS—Showing the Number of Pupils receivin kept, the Extent and Rent per Statute Acre of the Model Farm, the Expenses of an operation, as returned by their respective Conductors, and certified by the Managers, o

SCHOOL.	COUNTY.	PUPILS.								LIVE STOCK.					PARTICULARS OF MODEL FARM.		
		Receiving Agricultural Instruction.				Industrial Class.											
		Boarders.					Paid locally.										
		Free.	Paying	Day Pupils.	Total.	Paid by Board.	Patron.	Teacher.	Total.	Draught Animals.	Black Cattle.	Sheep.	Pigs.	Poultry.	Extent.	Rent, or Value per Acre (statute).	Rotations followed.
MODEL AGRICULTURAL SCHOOLS.																	
Under the immediate and exclusive management of the Commissioners.															A. R. P.	£ s. d.	
Albert, Glasnevin, .	Dublin, .	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Model Garden, do.	Do., .	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Indust. Gardens, do.	Do., .	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Bailieboro' District,	Cavan, .	3	4	34	41	7	.	.	7	1	9	.	2	.	17 0 0	1 14 1	4, 5, Shifts.
Dunmanway Dist., .	Cork, .	1	2	50	53	12	.	.	12	1	7	.	3	11	12 1 4	2 10 0	3, 4, Shifts.
Athy Dist. Model, .	Kildare, .	4	4	42	50	12	.	.	12	3	16	.	9	26	60 0 0	1 10 0	3, 7, Shifts.
Glandore, . . .	Cork, .	1	1	28	30	.	.	.	.	1	11	5	8	14	24 3 8	1 5 0	3, 4, Course.
Farrahy, . . .	Do., .	1	3	14	18	6	.	.	6	2	9	.	11	16	41 3 8	0 11 5	3, 4, 5, Cours
Tervoe, . . .	Limerick, .	1	2	17	20	.	.	.	.	2	9	.	17	15	29 0 5	1 0 0	2, 4, Course.
Kyle Park, . .	Tipperary,	1	2	12	15	6	.	.	6	1	3	.	5	26	16 0 0	1 0 0	3, 4, Course.
Derrycastle, . .	Do., .	1	2	12	15	6	.	.	6	1	4	10	6	13	18 1 22	0 14 0	4 Course.
Gormanstown, . .	Do., .	1	2	12	15	5	.	.	5	2	9	.	11	32	48 2 3	1 0 0	Do.
Leitrim, . . .	Leitrim, .	1	4	10	15	.	.	.	.	1	8	.	6	13	15 0 0	0 16 0	3, 4, Course.
Bath, . . .	Monaghan,	.	.	12	.	.	.	.	.	2	7	.	3	.	41 2 14	0 14 9	4 Course.
Ballymoney, . .	Antrim, .	.	.	.	.	.	.	.	.	.	.	.	.	.	23 1 38	2 5 0	3, 5, Course.
Munster (Cork), .	Cork, .	.	.	.	.	.	.	.	.	4	37	127	21	33	126 3 17	1 14 0	2, 3, 4, Course
Mungrett (Limerick),	Limerick, .	.	.	.	.	.	.	.	.	1	22	36	.	.	70 3 0	1 0 0	None yet estab
Templedouglas,[a] .	Donegal, .	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Kilkenny,[a] . .	Kilkenny, .	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Mt. Trenchard, .	Limerick, .	.	4	14	18	6	6	2	14	2	13	.	6	70	30 0 0	0 14 0	4, 5, Course.
Woodstock, . .	Kilkenny, .	.	2	18	20	8	.	.	8	1	4	.	2	24	8 2 35	1 0 0	4, 5, 6, Course.
Under local management.																	
Larne, . . .	Antrim, .	.	3	34	37	6	.	.	6	1	3	.	1	12	7 1 3	3 0 0	3, 4, Course.
Kilwaughter,[b] .	Do., .	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Markethill, . .	Armagh, .	1	3	14	18	.	.	.	.	1	7	2	.	6	18 1 7	1 16 5	3, 6, Course.
Carrick, . . .	Fermanagh,	.	.	16	16	.	.	2	2	1	8	4	12	34	30 0 0	1 0 0	4 Course.
Drumhilla, . .	Monaghan,	3	.	10	13	6	.	.	6	3	13	20	13	24	48 0 0	1 0 7½	3, 4, Course.
Loughashe, . .	Tyrone, .	.	15	14	29	.	.	.	.	2	28	8	6	40	48 0 10	0 13 10	5, 6, Course.
Sallybank, . .	Clare, .	.	.	20	24	4	.	2	6	1	8	.	9	30	16 0 0	0 12 6	6 Course.
Belvoir, . . .	Do., .	.	.	24	26	6	.	.	6	1	2	8	10	13	12 0 0	1 0 0	3, 4, 5, Course
Rahan, . . .	King's Co.,	.	.	40	40	4	.	2	6	1	4	1	15	24	12 3 3	0 18 6	4 Course.
Dromisken, . .	Louth, .	1	1	32	34	6	.	.	6	1	4	.	6	24	10 3 12	1 5 0	3, 4, Course.
Loughrea, . .	Galway, .	.	.	12	12	.	.	.	.	.	5	.	1	16	9 3 35	0 18 6	5 Course.
Ballinakill, . .	Do., .	.	1	25	26	.	6	.	6	.	7	.	5	60	12 0 0	0 15 6	4 Course.
Castle Hacket, .	Do., .	.	1	15	16	6	.	.	6	1	1	19	2	30	16 2 32	0 8 0	3, 5, Course.
Gloungarrah, . .	Waterford,	.	.	26	26	6	6	.	12	.	2	.	2	30	12 0 0	0 10 0	5 Course.
Cahersherkin, . .	Clare, .	.	.	20	20	4	2	2	8	1	4	.	6	18	10 2 0	0 6 0	4, 5, Course.
Dunlewy,[a] . .	Donegal, .	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
ORDINARY AGRICULTURAL SCHOOLS.																	
Ballycarry, . .	Antrim, .	.	.	28	28	4	4	.	8	1	3	1	1	16	7 1 20	1 4 8½	4 Course.
Collin,[c] . . .	Do., .	.	.	9	9	.	.	.	.	.	2	.	.	.	7 0 0	0 8 1	3 Course.
Ballytibbert,[c] . .	Do., .	.	.	28	28	.	.	.	.	.	1	1	1	2	3 0 0	1 7 0	Do.
Taniokey, . .	Armagh, .	.	.	28	28	.	.	1	1	.	4	.	1	12	10 2 4	1 5 7	4 Course.
Drumkerl, . .	Cavan, .	.	.	13	13	.	.	.	.	1	5	.	.	9	16 0 31	0 9 3	Do.
Lough Ramor, . .	Do., .	.	.	32	32	.	.	.	.	.	5	.	1	22	2 0 0	0 9 0	Do.
Balleighan, . .	Donegal, .	.	.	14	14	4	2	2	8	1	4	.	.	24	12 0 0	1 0 0	5 Course.
Carradoan, . .	Do., .	.	.	16	16	.	.	.	.	.	.	4	.	6	4 3 30	0 11 0	4 Course.
Crislagh, . . .	Do., .	.	.	12	12	.	.	.	.	.	2	.	.	.	6 3 0	0 9 4	3, 4, Course.
Cloghan,[d] . . .	Do., .	.	.	17	17	.	.	.	.	.	2	.	.	.	10 0 0	0 10 0	4 Course.
Convoy, . . .	Do., .	.	.	8	8	.	.	.	.	.	3	2	2	16	10 0 0	1 0 0	Do.
Ballyougry, . .	L. derry, .	.	.	9	9	.	.	.	.	1	5	.	2	21	6 0 21	0 17 6	Do.
Bohill, . . .	Do., .	.	.	15	15	.	.	.	.	.	2	.	1	7	4 3 2	0 12 0	None yet estab
Kidnaminsha, . .	Monaghan,	.	.	16	16	.	.	.	.	1	3	1	4	.	14 0 21	1 1 6	4 Course.
Dressog,[e] . . .	Tyrone, .	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Drumnafern, . .	Do., .	.	1	18	19	4	2	2	8	.	3	.	1	20	5 1 16	0 11 0	5 Course.
Five-mile-town,[e] .	Do., .	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Ballynenor,[f] . .	Do., .	.	.	10	10		.	.	.	1	14	.	2	20	10 0 0	—	4 Course.
Parteen, . . .	Clare, .	.	.	30	30	2	2	.	4	.	3	.	11	20	2 1 0	3 11 0	Do.
Feakle, . . .	Do., .	.	.	24	24	.	.	.	.	.	6	.	6	12	5 3 0	0 19 7	Do.
Bridgetown, . .	Do., .	.	.	28	28	.	.	.	.	1	4	2	8	8	2 0 0	2 10 0	3 Course.
Kildinan, . . .	Cork, .	.	.	12	12	4	.	2	6	.	1	1	.	12	7 2 0	0 10 0	4 Course.
Clonkeen, . . .	Do., .	.	.	25	25	.	.	.	.	1	8	12	5	36	7 1 12	1 0 0	Do.
Lismore,[g] . . .	Waterford,	.	.	24	24	.	.	.	.	.	.	.	.	.	5 0 0	1 10 0	5 Course.
Killacolla, . .	Limerick, .	.	.	16	16	.	.	.	.	.	5	.	2	12	14 0 0	0 14 3	3 Course.

[a] Not yet in operation. [b] Suspended—Agriculturist left. [c] Only a few months in operation. [d] Only a few months in connexion. [e] Suspended.

Agricultural Instruction, the Number in the "Industrial Class," the Quantity of Live Stock Profit or Loss on the Cultivation for the past year, for each of the Agricultural Schools in the 31st December, 1854.

Expenses of Cultivation.					Results of Cultivation.			
					Total Profit or Loss.		Acreable Profit or Loss.	
Amount paid for Labour.	Value of the free Labour of the Pupils, &c.	Cost of Seeds, Manures, implements, &c.	Rent, Rates, and Taxes.	Total.	Profit.	Loss.	Profit.	Loss.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
57 18 5	4 0 0	41 11 4	31 3 9	134 13 6	—	27 17 0	—	1 12 8
39 8 2	10 0 0	28 9 6	31 12 8	99 10 4	—	18 19 6	—	1 11 0
195 4 1	12 10 0	94 6 3	111 17 11	413 18 3	83 11 9	—	1 7 11	—
93 2 7	—	56 16 0	34 0 9	183 0 4	—	11 9 7	—	0 10 5
82 13 10	6 0 0	109 5 8	26 9 1	224 8 7	48 8 6	—	1 3 0	—
51 2 7	2 7 6	31 12 1	29 8 0	114 10 2	17 10 4	—	0 12 1	—
38 4 9	6 0 0	53 9 1	19 3 9	116 17 8	43 14 1½	—	2 14 7	—
54 19 10	5 0 0	38 15 4	14 12 3	113 7 5	6 13 10	—	0 7 3	—
110 7 11	10 0 0	134 14 5	37 12 3	292 14 7	42 14 6	—	0 17 6	—
46 13 6	5 0 0	32 11 9	13 19 4	98 4 7	30 9 7	—	2 7 8	—
84 12 4	—	48 5 9	33 7 8	166 5 9	7 9 0	—	0 3 7	—
73 10 5	—	115 1 10	60 14 11	249 7 2	—	11 12 0	—	0 9 9
214 4 6	—	195 15 0	270 17 0	680 16 6	168 10 5	—	1 6 6	—
79 9 0	—	75 0 4	76 11 6	231 0 10	35 3 3	—	0 7 6	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
50 13 6	20 0 0	16 16 11	23 15 10	111 6 3	40 5 10	—	1 6 10	—
17 6 11	4 4 7	7 4 4	9 10 3	38 6 1	20 16 10	—	2 7 9	—
22 0 3	5 0 0	7 2 3	22 12 0	56 14 6	17 11 5	—	2 8 4	—
—	—	—	—	—	—	—	—	—
22 13 11	1 5 0	29 17 0	35 15 8	89 11 8	27 14 7	—	1 10 6	—
22 5 1	3 10 0	5 14 6	33 3 11	64 13 6	43 15 4	—	1 9 2	—
21 8 4	10 0 0	13 8 2	52 1 7	96 18 1	43 3 1	—	0 17 11	—
59 18 10	37 17 10	21 7 7	37 9 11	156 14 2	138 18 9	—	2 17 10	—
28 14 9	5 0 0	11 12 7	8 4 8	53 12 0	10 11 8	—	0 13 4	—
8 18 2	7 0 0	5 10 9	12 0 0	33 8 11	24 11 6	—	2 1 0	—
14 6 10	3 0 0	15 8 3	12 13 1	45 8 2	43 19 4	—	3 10 0	—
17 17 10	5 10 0	12 0 6	14 16 0	50 4 4	30 14 9	—	2 16 9	—
12 12 2	1 0 0	4 18 9	10 14 8	29 5 7	30 12 11	—	3 4 0	—
18 11 0	5 0 0	7 16 0	9 6 8	40 13 0	68 5 0	—	5 13 9	—
3 7 6	5 0 0	9 13 9	6 13 11	24 15 2	13 13 4	—	0 16 6	—
13 19 11	3 15 0	20 4 2	7 6 2	45 5 3	9 7 3	—	0 15 7	—
24 8 10	6 7 6	33 8 0	4 6 0	68 10 4	29 9 10	—	2 14 3	—
—	—	—	—	—	—	—	—	—
12 10 10	5 4 0	9 5 2	10 16 6	37 16 6½	35 0 10	—	4 15 0	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
11 12 1	3 0 0	7 9 3	14 14 10	36 16 2	20 6 10	—	1 18 9	—
6 15 0	1 0 0	0 17 11	8 5 6	16 18 5	29 11 8	—	1 16 6	—
4 4 11	—	2 16 8	0 18 6	8 0 1	5 10 3	—	2 15 1	—
19 5 3	7 16 0	14 11 4	14 5 1	55 17 8½	33 12 9	—	2 16 1	—
15 1 8	—	9 8 5	3 4 8	27 14 9	5 5 6	—	1 1 4	—
5 8 4	0 15 0	4 12 5	4 2 9	14 18 6	7 5 0	—	1 1 6	—
—	—	—	—	—	—	—	—	—
21 9 1	—	8 19 7	13 0 9	43 9 6	7 8 8	—	0 14 10	—
6 4 8	0 10 0	5 15 10	6 0 6	18 11 0	25 0 6	—	4 1 9	—
3 12 0	0 10 0	2 16 6	2 18 0	9 16 6	13 7 4	—	2 16 1	—
34 14 7	—	9 8 10	15 15 7	59 19 0	—	1 11 1	—	0 2 2
—	—	—	—	—	—	—	—	—
7 11 11	2 0 0	2 7 1	3 13 10	15 12 10	8 15 10	—	1 12 10	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
3 12 7	3 0 0	6 5 9	8 10 0	21 8 4	22 18 2	—	10 3 7	—
15 0 7	0 15 0	8 17 1	7 12 4	32 5 0	9 16 1	—	1 14 1	—
4 4 3	0 5 0	22 11 10	5 10 0	32 11 1	14 9 8	—	7 4 10	—
6 9 0	2 0 0	3 16 2	3 17 0	18 14 8	11 9 10	—	1 10 7	—
15 4 11	0 6 0	12 4 3	7 19 8	35 14 10	15 16 2	—	2 3 1	—
—	—	—	—	—	—	—	—	—
3 19 2	2 0 0	3 9 0	11 1 0	20 9 2	51 15 11	—	3 13 11	—

no Agricultural Teacher. [f] Only a few weeks in connexion. [g] Being cultivated in connexion with a larger farm, a separate account has not been kept

SCHOOL.	COUNTY.	PUPILS.								Live Stock.					Particulars of Model Farm.		
		Receiving Agricultural Instruction.				Industrial Class.											
		Boarders.				Paid by Board.	Paid locally.			Draught Animals.	Black Cattle.	Sheep.	Pigs.	Poultry.	Extent.	Rent, or Value per Acre (statute).	Rotations followed.
		Free.	Paying.	Day Pupils.	Total.		Patron.	Teacher.	Total.						A. R. P.	£ s. d.	
ORDINARY AGRICULTURAL SCHOOLS—*continued.*																	
Garryhill,	Carlow,	.	.	12	12	4	4	.	8	.	5	.	2	12	4 2 37	0 14 9	4 Course.
Two-mile-house,	Kildare,	.	.	24	24	.	.	.	.	1	2		2	.	4 3 17	0 18 6	Do.
Kilberry,	Do.,	.	.	10	10	6	.	.	6	1	2	.	2	12	3 0 0	0 12 6	3 Course.
Piltown,	Kilkenny,	.	.	19	19	4	4	.	8	1	3	.	2	.	8 2 18	1 10 10	4 Course.
Ooning,	Do.,	.	.	12	12	.	.	.	.	1	.	.	2	8	4 2 7	1 2 6	5 Course.
Ballygloss,	Do.,		.	12	12	.	4	.	4	.	1	.	.	6	3 3 27	0 12 9	4 Course.
Ratoath,	Meath,	.	.	24	24	.	.	.	.	.	7	.	4	12	7 2 30	1 8 6	Do.
Woodpole,a	Do.,	.	.	.	.	.	.	.	.	.	.	.	.	.	17 3 32	1 0 0	5 Course.
Kilskyre,	Do.,	.	.	30	30	4	4	.	8	.	5	.	2	16	2 3 13	0 15 10	3 Course.
Ballinvally,	Westmeath,	.	.	30	30	4	2	2	8	.	1	.	1	.	2 2 10	0 16 0	4 Course.
Clonmellon,	Do.,	.	.	18	18	.	.	.	.	.	1	.	.	.	6 1 9	1 4 8	Do.
Mullingar,	Do.,	.	.	40	40	4	.	4	8	1	3	.	5	.	11 3 15	1 0 0	6 Course.
Delgany,	Wicklow,	2	.	28	28	.	.	.	.	.	4	.	1	12	4 0 0	1 5 0	3 Course.
Esker,b	Galway,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Clonkeenkoryl,	Do.,	.	.	16	16	4	.	1	5	1	13	10	3	30	25 2 13	0 10 0	4 Course.
Cappaduff,	Mayo,	.	.	15	15	6	.	.	6	.	3	16	2	15	4 1 7	0 6 2	Do.
Lahardane,c	Do.,	.	.	20	20	.	.	.	.	1	4	2	1	12	16 0 0	0 12 6	Do.
Cornafulla,	Roscommon,	.	.	16	16	4	.	.	4	.	3	.	3	10	12 2 1	0 9 3	Do.
Killenagh,	Do.,	.	2	46	48	4	2	2	8	.	2	.	7	14	9 1 10	0 18 6	Do.
Glanduff,	Do.,	.	.	24	24	4	.	4	8	3	5	14	13	23	20 3 10	0 7 10	3, 4, Course.
Geevagh,	Sligo,	.	.	22	22	.	.	.	.	.	1	.	1	11	2 0 0	1 10 0	4 Course.
Upper Arigna,	Do.,	.	.	14	14	.	.	.	.	.	1	.	.	13	4 0 0	0 12 0	Do.
WORKHOUSE AGRICULTURAL SCHOOLS.																	
Antrim,	Antrim,	.	.	19	19	.	.	.	.	1	4	.	2	.	18 2 0	2 10 0	4 Course.
Belfast,	Do.,	.	.	35	35	.	.	.	.	.	.	.	.	.	1 2 0	2 0 0	Do.
Ballymena,	Do.,	.	.	4	4	.	.	.	.	.	.	.	.	.	10 0 0	2 10 0	—
Ballycastle,	Do.,	.	.	6	6	.	.	.	.	.	3	.	2	.	8 0 11	1 3 5	4 Course.
Ballymoney,	Do.,	.	.	12	12	.	.	.	.	1	4	.	12	.	13 0 13	2 8 0	3 Course.
Larne,	Do.,	.	.	19	19	.	.	.	.	.	.	.	.	.	2 3 30	3 0 0	4 Course.
Banbridge,	Down,	.	.	16	16	.	.	.	.	.	.	.	.	.	8 2 24	2 5 0	Do.
Newtownards,d	Do.,	.	.	12	12	.	.	.	.	.	.	.	.	.	—	—	—
Londonderry,	L.derry,	.	.	10	10	.	.	.	.	.	.	.	12	.	8 0 2	2 0 0	6 Course.
Coleraine,	Do.,	.	.	6	6	.	.	.	.	.	.	.	10	.	12 2 0	2 16 0	3 Course.
Strabane,	Tyrone,	.	.	28	28	.	.	.	.	.	.	.	2	.	12 3 36	2 4 9	4 Course.
Castleblayney,	Monaghan,	.	.	30	30	.	.	.	.	.	.	.	.	.	4 0 6	1 6 6	3, 5 Course.
Clones,	Do.,	.	.	16	16	.	.	.	.	1	.	.	.	.	9 0 0	1 19 1	—
Monaghan,	Do.,	.	.	15	15	.	.	.	.	.	.	.	.	.	1 0 18	2 0 0	6 Course.
Carrickmacross,d	Do.,	.	.	24	24	.	.	.	.	.	.	.	.	.	1 0 0	2 0 0	—
Ennis,	Clare,	.	.	40	40	.	.	.	.	2	.	.	12	.	5 2 0	6 0 0	—
Tulla,	Do.,	.	.	30	30	.	.	.	.	1	.	.	6	.	5 0 0	0 12 6	—
Scariff,e	Do.,	.	.	20	20	.	.	.	.	.	.	.	.	.	4 0 0	—	—
Corofin,	Do.,	.	.	20	20	.	.	.	.	2	.	.	.	.	6 0 0	3 0 0	—
Bandon,	Cork,	.	.	18	18	.	.	.	.	1	.	.	.	.	4 0 0	2 3 2	4 Course.
Bantry,	Do.,	.	.	23	23	.	.	.	.	.	.	.	.	.	3 1 0	1 17 0	6 Course.
Castletown,	Do.,	.	.	20	20	.	.	.	.	.	.	.	.	.	2 3 23	1 0 0	4 Course.
Skull,d	Do.,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Skibbereen,	Do.,	.	.	32	32	.	.	.	.	.	.	.	.	.	5 0 0	1 0 0	6 Course.
Dunmanway,	Do.,	.	.	12	12	.	.	.	.	.	.	.	.	.	2 0 0	0 15 0	4 Course.
Mitchelstown,e	Do.,	.	.	30	30	.	.	.	.	.	.	.	.	.	6 0 0	—	—
Clonakilty,e	Do.,	.	.	16	16	.	.	.	.	.	.	.	.	.	3 0 0	—	—
Kenmare,d	Kerry,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Listowell,	Do.,	.	.	15	15	.	.	.	.	2	.	.	.	.	36 0 0	0 15 0	2 Course.
Tralee,	Do.,	.	.	80	80	.	.	.	.	2	.	.	.	.	23 1 17	2 9 4	4 Course.
Kilmallock,	Limerick,	.	.	75	75	.	.	.	.	.	.	.	.	.	27 0 0	2 0 10	4, 5, Course.
Newcastle,	Do.,	.	.	30	30	.	.	.	.	.	.	.	.	.	20 0 0	0 17 2	3, 4, Course.
Carrick-on-Suir,	Tipperary,	.	.	12	12	.	.	.	.	3	3	.	.	.	27 2 10	3 12 5	4 Course.
Cashel,	Do.,	.	.	60	60	.	.	.	.	.	.	.	.	.	23 3 37	0 18 0	Do.
Clogheen,	Do.,	.	.	86	86	.	.	.	.	1	.	.	.	.	18 1 23	0 16 9	—
Clonmel,	Do.,	.	.	80	80	.	.	.	.	2	.	.	.	.	30 0 0	3 8 0	5 Course.
Nenagh,	Do.,	.	.	80	80	.	.	.	.	1	.	.	.	.	6 2 0	3 0 0	—
Roscrea,	Do.,	.	.	17	17	.	.	.	.	.	.	.	.	.	4 3 30	2 0 0	6 Course.
Tipperary,	Do.,	.	.	45	45	.	.	.	.	.	.	.	.	.	8 3 12	1 12 6	3 Course.
Lismore,	Waterford,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Dungarvan,	Do.,	.	.	80	80	.	.	.	.	2	4	.	.	.	7 0 0	2 19 6	6 Course.
Kilmacthomas,	Do.,	.	.	15	15	.	.	.	.	.	.	.	.	.	12 3 4	1 0 0	4 Course.
Balrothery,	Dublin,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Dublin(North Union),	Do.,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Rathdown,	Do.,	.	.	20	20	.	.	.	.	.	.	.	.	.	15 0 0	—	—

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[a] Suspended—no Teacher since July.

[b] Suspended—Agriculturist resigned on obtaining another appointment.

AGRICULTURAL SCHOOLS—*continued.*

Expenses of Cultivation.					Results of Cultivation.			
					Total Profit or Loss.		Acreable Profit or Loss.	
Amount paid for Labour.	Value of the free Labour of the Pupils, &c.	Cost of Seeds, Manure, Implements, &c.	Rent, Rates, and Taxes.	Total.	Profit.	Loss.	Profit.	Loss.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1 0 0	9 3 2	9 15 4	3 13 11	23 12 5	20 12 9	—	4 7 0	—
9 1 10	1 12 0	6 15 0	4 12 0	27 0 8	14 17 10	—	3 2 6	—
8 0 0	3 15 0	15 7 0	—	27 2 0	6 2 0	—	2 0 8	—
12 2 6	9 7 6	10 14 7	9 4 5	41 9 0	24 15 4	—	2 17 6	—
2 6 2	3 15 0	2 19 7	5 11 8	14 12 5	7 14 1	—	1 13 10	—
4 5 5	1 19 0	3 3 4	2 10 0	11 8 9	6 12 3	—	1 13 8	—
9 16 0	1 10 0	2 10 4	11 0 0	23 6 3	31 0 8	—	4 1 4	—
—	—	—	—	—	—	—	—	—
6 4 2	5 0 0	8 8 6	2 7 0	21 19 8	32 9 2	—	11 9 2	—
1 15 4	3 16 6	4 10 8	2 3 8	12 6 2	11 19 10	—	4 14 0	—
7 10 0	2 4 8	2 10 6	8 7 11	20 13 1	6 18 11	—	1 2 0	—
20 5 0	6 0 0	10 0 0	12 10 0	48 15 0	11 15 0	—	1 0 0	—
2 2 10	16 16 0	14 5 1	6 13 10	39 17 9	20 13 4	—	5 3 4	—
—	—	—	—	—	—	—	—	—
41 0 11	1 0 0	11 15 8	20 16 10	74 13 5	160 12 8	—	6 5 7	—
6 8 2	5 7 4	2 10 6	3 7 0	17 13 0	6 11 4	—	1 10 7	—
—	—	—	—	—	—	—	—	—
37 12 7	3 7 6	5 19 10	5 11 2	52 11 1	16 18 7	—	1 7 1	—
22 16 6	9 4 6	4 7 10½	8 15 4	45 14 2	3 3 1	—	0 6 9	—
35 12 4	3 0 0	12 5 10	10 9 10	61 8 0	38 13 2	—	1 17 1	—
1 17 10	1 5 0	4 14 9	3 10 0	11 7 7	3 5 5	—	1 12 8	—
3 17 6	—	2 17 4	2 14 8	9 9 6	0 16 6	—	0 4 1	—
—	82 6 0	10 0 0	47 10 0	132 4 6	82 6 0	—	4 9 0	—
—	14 0 0	6 4 3	3 6 0	23 10 3	14 0 0	—	9 6 8	—
1 10 0	36 10 8	3 6 10	21 10 11	62 18 6	36 10 8	—	3 13 0	—
15 7 8	89 18 0	17 4 9	11 18 6	134 8 11	89 18 0	—	11 2 10	—
2 4 7	122 16 1	37 5 1	34 12 5	196 18 2	122 16 1	—	9 7 9	—
2 14 3	14 9 2	4 2 7	9 19 9	31 5 9	14 9 2	—	4 19 2	—
11 6 3	86 19 7	15 15 3	19 9 4	83 10 5	36 19 7	—	4 5 6	—
—	—	—	—	—	—	—	—	—
—	106 18 2	15 5 3	16 0 6	138 3 11	106 18 2	—	13 7 3	—
3 0 0	70 0 0	12 8 10	26 1 9	111 10 7	75 16 3	—	6 1 3	—
5 1 6	21 5 8	7 9 9	31 13 10	65 10 9	21 5 8	—	1 12 10	—
0 12 0	4 0 0	10 12 1	4 11 8	20 2 8	4 7 0	—	1 1 6	—
4 2 6	20 11 7	6 8 0	17 11 9	48 13 10	20 11 7	—	2 5 8	—
—	13 6 8	0 17 4	2 6 6	16 10 6	13 6 8	—	12 0 0	—
—	—	—	—	—	—	—	—	—
16 18 6	108 6 2	8 17 6	33 0 0	167 2 2	108 6 2	—	19 13 10	—
11 12 0	20 18 6	11 10 4	3 2 6	53 9 0	20 18 5	—	4 3 8	—
—	—	—	—	—	—	—	—	—
1 5 0	50 2 2	3 4 0	18 12 10	73 4 0	50 2 2	—	8 7 0	—
—	36 7 4	13 2 11	8 12 9	58 3 0	36 7 4	—	9 1 10	—
—	51 3 5	10 19 1	6 0 0	68 2 6	51 3 5	—	15 14 10	—
0 3 6	37 5 11	11 10 2	2 17 10	51 17 6	37 5 11	—	12 17 9	—
—	—	—	—	—	—	—	—	—
—	54 11 8	11 0 2	5 0 0	65 11 10	54 11 8	—	10 18 4	—
—	17 9 0	4 1 4	1 10 0	23 0 4	17 9 0	—	8 14 6	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
30 15 0	121 5 2	21 16 10	29 13 3	203 10 3	121 5 2	—	3 7 4	—
—	168 15 6	10 11 0	77 18 3	257 4 9	108 15 6	—	7 5 0	—
88 6 1	7 18 5	43 18 0	55 6 4	195 8 10	7 18 5	—	0 5 10	—
74 4 9	145 12 9	27 7 5½	17 6 0	264 11 0	145 12 9	—	7 5 7½	—
39 17 4	—	47 3 3½	116 6 0	205 17 2	—	36 4 2	—	1 6 0
0 8 0	67 7 6	21 4 4	23 15 0	112 14 10	67 7 6½	—	2 16 2	—
—	80 0 0	13 16 5	11 4 4	105 0 9	80 0 0	—	5 19 6	—
37 13 0	15 14 9	37 17 4	102 0 0	193 5 2	15 14 9	—	0 10 6	—
—	110 9 10	7 11 9	27 10 0	145 11 7	110 9 10	—	17 0 0	—
—	84 19 7	26 6 10	9 17 6	121 3 11	84 19 7	—	17 4 3	—
—	97 4 5	15 18 10	15 18 3	129 1 6	97 4 5	—	11 0 3	—
—	—	—	—	—	—	—	—	—
40 0 0	55 14 5	25 15 1	20 16 8	142 6 2	55 14 5	—	7 19 2	—
19 19 6	5 14 1	13 11 9	12 15 6	46 6 9	5 14 1	—	0 9 0	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
26 0 4	118 0 2	25 0 0	36 0 0	87 0 6	118 0 2	—	7 17 4	—

[c] But a few months in connexion. [d] Suspended for a time owing to a change of Teachers. [e] But a few days in connexion.

School.	County.	Pupils.								Live Stock.					Particulars of Model Farm.		
		Receiving Agricultural Instruction.				Industrial Class.									Extent.	Rent, or Value per Acre (statute.)	Rotations followed.
		Boarders.					Paid locally.										
		Free.	Paying.	Day Pupils.	Total.	Paid by Board.	Patron.	Teacher.	Total.	Draught Animals.	Black Cattle.	Sheep.	Pigs.	Poultry.			
WORKHOUSE AGRICULTURAL SCHOOLS—*continued.*															A. R. P.	£ s. d.	
Athy,	Kildare,	.	.	60	60	.	.	.	.	.	.	.	.	.	34 0 14	1 14 11	3, 6, Course.
Naas,	Do.,	.	.	15	15	.	.	.	.	.	.	.	.	.	6 1 3	2 10 0	—
Thomastown,	Do.,	.	.	28	28	.	.	.	.	.	.	.	.	.	28 1 32	1 1 6	—
Urlingford,	Do.,	.	.	20	20	.	.	.	.	.	.	.	.	.	9 2 2	1 1 1	—
Tullamore,	King's,	.	.	57	57	.	.	.	.	.	.	.	.	.	6 3 31	2 10 0	4 Course.
Granard,	Longford,	.	.	30	30	.	.	.	.	.	.	.	.	.	4 2 25	0 15 4	6 Course.
Trim,	Meath,	.	.	30	30	.	.	.	.	.	.	.	.	.	2 1 26	2 0 0	8 Course.
Navan,	Do.,	.	.	20	20	.	.	.	.	.	.	.	.	.	1 1 14	2 9 4	—
Kells,	Do.,	.	.	15	15	.	.	.	.	2	.	.	.	.	3 1 10	2 0 0	4 Course.
Oldcastle,	Do.,	.	.	25	25	.	.	.	.	.	.	.	.	.	8 0 13	2 10 0	2, 4, Course.
Dunshaughlin,	Do.,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Abbeyleix,	Queen's,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Enniscorthy,	Wexford,	.	.	25	25	.	.	.	.	3	.	.	.	.	33 0 0	3 0 0	4 Course.
New Ross,	Do.,	.	.	40	40	.	.	.	.	1	.	.	.	.	12 0 27	3 0 0	2 Course.
Galway,	Galway,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Mountbellew,	Do.,	.	.	24	24	.	.	.	.	1	.	.	4	.	6 0 0	1 0 0	7 Course.
Portumna,[a]	Do.,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Ballinasloe,[a]	Do.,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Carrick-on-Shannon,[a]	Leitrim,	.	.	12	12	.	.	.	.	1	.	.	3	.	3 3 12	—	—
Ballina,[b]	Mayo,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Ballinrobe,[b]	Do.,	.	.	.	.	.	.	.	.	.	.	.	.	.	—	—	—
Belmullet,	Do.,	.	.	5	5	.	.	.	.	.	.	.	.	.	3 0 0	1 0 0	—
Westport,	Do.,	.	.	12	12	.	.	.	.	.	.	.	.	.	2 0 0	3 12 0	—
Swineford,	Do.,	.	.	18	18	.	.	.	.	.	.	.	8	.	8 0 0	0 7 5	—
Strokestown,	Roscommon,	.	.	18	18	.	.	.	.	2	.	.	.	.	17 0 10	1 2 6	2 Course.
Total,[c]		22	59	3103	3184	182	50	30	262	89	433	42	372	1135	1,812 1 26	—	—

[a] No return, recently connected.

[b] No Report or Returns—Agriculturist left.

NUMBER OF AGRICULTURAL SCHOOLS, 1854.—Model, 33; Ordinary, 48; Workhouse, 69

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NO. 2.—REPORTS ON MODEL AGRICULTURAL SCHOOLS.

1. ALBERT NATIONAL AGRICULTURAL TRAINING INSTITUTION, GLASNEVIN.

SIR,—In furnishing the present Report of the Albert Agricultural Institution it is necessary, in the first place, to remark that, owing to circumstances, it embraces a period of seventeen instead of twelve months, as formerly, viz.: from November 1, 1853, to March 31, 1855.

It affords me much gratification to be able to say, that after years of persevering energy on your own part, and the expenditure of no small amount of anxiety and care on that of others, this institution has now arrived at a state of efficiency which is highly creditable to all connected with its management and progressive advancement.

In some of my former Reports I took the liberty to advert to a few of those impediments which seemed to me to retard its progress. Those, however, have now completely disappeared; and the Commissioners of Education have at length raised a National Institution, which, I have every reason to believe, will yet amply reward them in the rich harvest of useful and scientific knowledge which future generations will reap from its instructions. Here the most recent scientific knowledge is brought to bear on the agricultural practices of the field; the pupil is made acquainted with the working of the newest and most improved farm-machinery and implements of culture—together with all the practical agricultural operations, both of the field and the farm-yard—

AGRICULTURAL SCHOOLS—*continued.*

Expenses of Cultivation.					Results of Cultivation.			
					Total Profit or Loss.		Acreable Profit or Loss.	
Amount paid for labour.	Value of the free Labour of the Pupils, &c.	Cost of Seeds, Manures, Implements, &c.	Rent, Rates, and Taxes.	Total.	Profit.	Loss.	Profit.	Loss.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
28 6 9	157 12 7	25 5 10	59 7 10	270 13 1	157 12 7	—	4 12 5	—
0 12 10	72 5 11	13 12 9	15 13 6	102 5 0	72 5 11	—	11 10 7	—
10 9 7	36 1 6	16 15 8	30 11 7	93 17 11	36 1 6	—	1 5 4	—
13 9 8	139 11 9	15 3 5	10 0 7	178 5 5	139 11 9	—	14 13 5	—
8 4 0	89 2 0	28 12 2	16 18 3	142 16 6	89 2 0	—	12 15 7	—
4 10 0	64 5 2	14 8 8	4 10 0	87 13 10	64 5 2	—	13 16 0	—
—	24 13 3	3 3 6	4 16 6	32 13 3	24 18 3	—	10 4 5	—
—	14 3 2	8 0 5	3 6 0	25 9 8	14 3 2	—	10 11 9	—
—	51 4 9	7 11 4	6 12 6	65 8 8	51 4 9	—	15 9 4	—
—	47 6 10	7 1 7	17 1 4	71 9 9	47 6 10	—	5 18 4	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
1 9 6	181 0 5	48 18 6	106 0 7	337 9 0	181 0 5	—	5 9 8	—
—	128 14 3	22 17 0	51 17 6	203 8 9	128 14 3½	—	10 11 6	—
—	—	—	—	—	—	—	—	—
—	35 14 7	9 17 10	6 0 0	51 12 5	35 14 7	—	5 18 1	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
10 7 1	2 0 0	6 18 7	3 3 8	22 9 4	8 7 6	—	2 15 10	—
—	4 5 10	5 2 8	7 4 6	16 13 0	4 5 10	—	1 14 4	—
—	44 4 6	6 13 1	2 19 2	53 16 9	44 4 6	—	5 10 6	—
12 17 1	163 16 4	24 3 7	20 12 8	221 9 8	163 16 4	—	9 12 8	—
—	—	—	—	11,128 0 10	5,175 15 6	107 13 4	—	—

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* Owing to the fact that the statistics of several schools have been incomplete, the totals here given must be looked upon as approximations.

School Gardens, 3; Total, 153. Number in 1853, 129; Increase, 24.

whilst, above all, his habits are formed with that amount of careful solicitude for his future welfare, that he is thoroughly prepared to enter upon the busy scenes of life with every prospect of success. The establishment, therefore, of an institution of this kind, where the sons of the farmer can receive their education free of every charge, is one of the greatest national boons which the Commissioners of Education could have conferred on the country.

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The new institution was opened on the 20th of February, 1854; and from the greater accommodation which it afforded, as well as from important and useful arrangements which were made, the class of agricultural pupils increased very considerably. The following table affords, in a concise manner, a summary of the attendance from November 1st, 1853, to March 31st, 1855; and attached to this Report is a list of the pupils who left during that period, with the term of their apprenticeship, and their destination at the time of leaving.

	Agricultural Pupils.	Agricultural Teachers.	Total.
At the Institution on November 1, 1853, .	47	1	48
Admitted from November 1, 1853, to March, 31, 1855, inclusively, ...	81	2	83
	128	3	131
Left from November 1, 1853, to March 31, 1855, inclusively, ...	57	3	60
At the Institution on April 1, 1855, . .	71	0	71

I have been much pleased with the general conduct of the pupils—with few exceptions it has been both praiseworthy and exemplary; and I have been equally satisfied with the manner in which most of the class discharged their duties. It has also afforded me much gratification to find that those pupils who received appointments from the institution, have performed the business committed to their care with ability and perseverance.

In the year 1854 I delivered two courses of lectures on agricultural subjects, to the literary teachers in training at the Model Schools of the Board, and one to the agricultural pupils at the Albert Institution; and in the spring of the present year (1855) I also delivered a short course to the former. Each of the literary classes numbered about 100, and the agricultural pupil class upwards of 70.

In drawing out this Report I am of opinion that statistical information, connected with the transactions of the farm, should constitute my principal object. I shall therefore confine myself to this department, and make my remarks on the different subjects which I may consider worthy of notice, as brief as possible.

As usual, *draining* formed an important item in our transactions, as well with the object of improving the land, as of imparting useful and absolutely necessary knowledge to the pupils. In 1854, an area of about nine three-quarter statute acres was drained; and in the spring of the present year, about nine additional acres, making altogether since the time I got charge of the management of the farm an area, drained, of about ninety-three statute acres. No doubt some may be disposed to conclude that, as this is a farm which occupies a very prominent position, the completion of its drainage should have been long ere this effected. In the case of a farmer, provided he possessed sufficient capital, this view of the matter is at once conceded; but in the case of a public institution, the principal object of which is the dissemination, as widely as possible, of useful agricultural information, particularly on a subject of so much importance as drainage, such an opinion is altogether erroneous. It is not *pecuniary profit* which should be the all-important object of an institution of this kind; it is the *wide diffusion of useful and important knowledge.* Suppose that I had effected the entire drainage of the farm in one year, what amount of *practical* information could have been afforded to the pupils on the subject during the six remaining years of my management? Comparatively trifling. Therefore I contend that, in regard to this operation, the best course, under existing circumstances, has been pursued.

In some of my former Reports I have explained the mode of drainage pursued on the farm, and therefore I do not consider it necessary to enter upon the subject again. The only departure which has been made from the original plan, consists in the distance allowed between the parallel drains. Formerly they were cut at twenty-four feet apart, and latterly at thirty feet, without any apparent drawback in their efficiency.

Experiments, also, in relation to various agricultural matters formed an interesting part of the proceedings of 1854—a detailed account of the particulars of which I beg to subjoin.

Experiment, No. 1.—This had relation to the daily consumption of green food by house-fed cattle. It extended over a period of twenty-three days, during which time the food consisted of green succulent grass and vetches. Each meal was accurately weighed and recorded, the refuse deducted, and the actual consumption made out as follows:—

TABLE showing results of Experiment, No. 1.

Date, 1854.		Quantity of Grass per day.			Quantity of Vetches per day.			Total.			Quantity of Food for each beast per day.			No. of Cattle.
		tons.	cwts.	stones.	tons.	cwts.	stones.	tons.	cwts.	stones.	cwts.	stones.	lbs.	
July	13,	1	2	1½	1	1	2½	2	3	4	1	2	3⅓	34
,,	14,	1	17	0½	1	5	1	3	2	1½	1	6	8½	,,
,,	15,	1	16	0	1	4	6	3	0	6	1	6	4	,,
,,	16,	1	6	1	1	8	5	2	14	6	1	4	12⅓	,,
,,	17,	0	18	2½	1	10	2	2	8	4½	1	3	6	,,
,,	18,	1	8	2	1	2	6	2	11	0	1	4	0	,,
,,	19,	2	5	0	0	11	5	2	16	5	1	5	4½	,,
,,	20,	2	5	0	0	14	1	2	19	1½	1	5	13	,,
,,	21,	1	14	2½	0	4	0	1	18	2½	1	1	0	,,
,,	22,	2	8	1½	0	11	1	2	19	2½	1	5	13⅓	,,
,,	24,	3	5	7	No more Vetches.			3	5	7	1	7	7	,,
,,	25,	2	8	0½		—		2	8	0	1	4	0	32
,,	26,	2	16	1		—		2	16	1	1	6	0	,,
,,	27,	2	15	0		—		2	15	0	1	4	13⅙	34
,,	28,	2	2	6		—		2	2	6	1	2	5 1/11	33
,,	29,	2	9	5½		—		2	9	5½	1	3	5	35
,,	30,	3	5	4½		—		3	5	4½	1	6	2½	37
,,	31,	2	18	4½		—		2	18	4½	1	5	0⅕	36
August	1,	2	1	0		—		2	1	0	1	1	1⅔	,,
,,	2,	2	12	0½		—		2	12	0½	1	3	8	,,
,,	3,	1	13	1		—		1	13	1	0	7	8	35
,,	4,	1	17	1		—		1	17	1	1	1	0	33
,,	5,	2	0	4		—		2	0	4	1	1	10	,,

The result of this experiment was, that each animal consumed, on an average, 1½ cwt. of green succulent food, daily.

Experiment, No. 2.—This had reference to the comparative effect of a mixture of common salt and guano, and nitrate of soda, on the wheat crop. The trial was made on spring wheat, of the variety called Uxbridge, and which had not by any means a promising appearance at the time the top-dressing was applied. The following is a record of the details and results, viz. :—

No. of Plot.	Date of sowing.	Date of reaping.	Mode of sowing.	Seed per stat. acre.	Produce of grain per statute acre.	Produce of straw per statute acre.	Weight of grain per bushel.	Top-dressing applied per statute acre.
				st. lbs.	brls. st. lbs.			
1	March 18th, 1854,	Sept. 18, 1854,	In drills, 8 inches apart,	3 8	5 18 13	2 tons,	61½ lbs.	8 stones guano, and 8 do. common salt mixed
2	Do.,	Do.,	Do.,	Do.,	7 3 4	Do.,	61 lbs.	4 stones nitrate of soda, on May 4th.
3	Do.,	Sept. 20,	Do.,	Do.,	6 5 4	Do.,	61 lbs.	None.

The plot top-dressed with nitrate of soda produced the greatest return of grain.

Experiment, No. 3.—This was made with the view of testing the return of produce from grain sowed at different distances apart in the drills. The description of grain experimented on was black Tartary oats; the land on which it was grown was of uniform quality throughout, and in excellent condition; and the yield in each case was very abundant. The following table exhibits the results :—

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TABLE showing results of Experiment, No. 3.

No. of Plot.	Date of sowing.	Date of reaping.	Mode of sowing.	Produce of grain per statute acre.							Weight of straw.		
					brls.	st.	lbs.	brls.	st.	lbs.	tons.	cwt.	st.
1	March 10th, 1854,	August 25th, 1854,	In drills, 8 inches apart,	1st quality,	13	10	1						
				2nd do.,	2	13	5						
				3rd do.,	0	10	6						
								17	5	12	2	9	3
2	Do.,	Do.,	In drills, 11 inches apart,	1st quality,	10	10	1						
				2nd do.,	2	6	0						
				3rd do.,	0	6	9						
								13	8	10	2	4	6

It will be perceived that the grain sown at eight inches apart in the rows yielded the greater return.

Experiment, No. 4.—The object in view in trying this experiment was to institute a comparison between the produce of grain sown broadcast, and grain sown in drills by the machine. The field selected for the purpose had been in grass on the previous year, but it was in very good condition, and well calculated to produce a good crop of the description of oats suitable for it. The broadcast plot was sown on the 21st, and the drilled plot on the 22nd of March, and both were reaped on the same day, the 29th of August. The following table exhibits the returns :—

No. of Plot.	Mode of sowing.	Seed per statute acre.	Produce of grain per statute acre.			Weight of grain per bushel.	Weight of straw per statute acre.			
			brls.	st.	lbs.		tons.	cwt.	qrs.	lbs.
1	In drills, 10 inches apart,	5 stones, of 14 lbs. each,	10	8	7	40 lbs.	2	0	0	7
2	Broadcast,	10 stones, of 14 lbs. each,	10	11	7	40 lbs.	1	18	1	6

Taking the seed into account in each case, the difference in the returns was very trifling—about two and a-half stones per acre in favour of the drilled plot.

Experiment, No. 5.—This had relation to the probable effect of liquid manure, when applied as a top-dressing to grass. With this object in view, a portion of field No 3, in the five-crop course, got occasional waterings of the liquid, whilst no application of any kind was given to the remainder. Four cuttings, previous to the 1st of November, were taken off the part thus top-dressed, and only two off the other. The description of grass on which the experiment was made was Italian rye-grass, and the soil throughout the field was of uniform quality, and in very good condition. It is only right to remark, however, that the field had been in grass in the previous year, and that, for the most part, the grass-crop of 1854 was very defective. The following table shows the returns :—

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TABLE showing results of Experiment, No. 5.

No. of Plot.	Date of cutting.	Produce, per statute acre, in a green state.	Total weight, per statute acre, in a green state.
		tons. cwt. qrs. lbs.	tons. cwt. qrs. lbs.
1	1st cutting, 11th May, 1854, ...	9 0 0 0	
	2nd cutting, 12th June, ...	12 10 0 0	
	3rd cutting, 4th August, ...	8 0 0 0	
	4th cutting, 27th September, . . .	3 19 1 24	33 9 1 24
2	1st cutting, 11th May, 1854, . . .	3 10 0 0	
	2nd cutting, 12th June, ...	2 0 0 0	5 10 0 0

The large return of grass from that portion of the field to which liquid manure was applied speaks so strongly in favour of the use of this substance for manurial purposes, that comment by me on the practice seems almost unnecessary. In our case the distribution was effected by means of the steam-engine, a mode which, of course, the small farmer could not employ. He could carry out the practice, however, more extensively than is done at present, by means of the liquid manure cart. I know that this mode of distribution incurs a great deal of expense, but the valuable returns which it insures afford ample compensation for the outlay. So convinced am I of the valuable effects of liquid manure, when properly applied, that I look upon the recent mode of distribution by means of the steam-engine—were it possible that it could be brought into general use—as one of the most important agricultural practices of the day. By means of it green food could be readily procured for house-fed cattle throughout eight or nine months of the year; whilst the large amount of food obtained from a comparatively small area of land would enable an increased number of cattle to be kept, and of course an increased produce realized.

Experiment, No. 6.—This was made for the purpose of ascertaining the reduction in weight which green Italian rye-grass undergoes in making it into hay. With this view, a portion of field, No. 1, in the three-crop course, was cut and weighed, and then subjected to the usual hay-making process. In a green state it weighed twelve tons per statute acre, and when made into hay, which occupied a period of twelve days, it weighed two tons fifteen hundred weight.

Experiment, No. 7.—The object of this experiment was to institute a comparison between the amount of produce obtained from beans to which, in addition to an average application of farm-yard manure, a quantity of sulphate of soda would be allowed. The beans on which the experiment was made were those of the winter variety, usually denominated Russian beans, and the land on which they were grown was of good quality, though not quite so heavy as this description of crop requires. The return was very poor, owing to a severe attack which the crop received from the *aphidae;* but as the effect produced was general, a record of the results appears perfectly legitimate. The following table affords the particulars, viz :—

[TABLE.

TABLE showing results of Experiment, No. 7.

No. of plot.	Date of sowing.	Date of cutting.	Mode of sowing.	Seed per stat. acre.	Produce of grain per stat. acre.	Weight of grain per bushel.	Weight of straw per statute acre.	Manure applied per statute acre.
					brls. st. lb.		tons cwt. qr. lb.	
1	Nov. 10. 1853,	Sep. 27, 1854,	In drills, 30 inches apart,	1½ bushels,	6 12 8*	67 lbs.	1 4 0 0	25 tons farm-yard, and top-dressed on 12th May with 2 cwt. of sulphate of soda.
2	Do.	Do.	Do.	Do.	7 8 12	66 lbs.	1 8 0 12	25 tons farm-yard only.

* The barrel of beans contains 20 stones of 14 lbs. each.

It will be seen that farm-yard manure alone produced the heavier return, both of grain and straw.

Experiment, No. 8.—This had relation to the flax crop. Unfortunately, however, various circumstances rendered any conclusions which might be deduced from it very unsatisfactory. I consider, therefore, that its insertion would be productive of no practical utility, and consequently I shall omit it altogether.

Experiment, No. 9.—This experiment was made on the potato crop, with the view of ascertaining whether or not the practice of pulling or of cutting the stalks, on the appearance of the blight, be so efficacious in preventing its injurious effects as is generally believed. In accordance with this object, three equal portions of ground, on which American bangors had been planted, were measured off on the first appearance of the disease; and every precaution subsequently taken to arrive at a correct conclusion in reference to the matter. The following table exhibits the particulars, viz. :—

No. of plot, and date of cutting or pulling the stalks.	Date of planting.	Date of raising the crop.	Mode of planting.	Produce per statute acre.			Per centage bad at time of raising.	Manure applied per statute acre.
				Sound.	Unsound.	Total.		
				tons cwt. qr. lb.	tons cwt. qr. lb.	tons cwt. qr. lb.		
1, Stalks cut 29th July,	March 9, 1854,	Oct. 10,	In drills 28 inches apart, & plants 12 inches asunder in the rows,	6 9 2 16	0 3 3 20	6 13 2 8	3, nearly.	30 tons farm-yard.
2, Stalks pulled 29th July,	Do.	Do.	Do.	6 14 0 7	0 3 3 20	6 17 3 28	2¼, do.	Do.
3, Stalks neither cut nor pulled,	Do.	Do.	Do.	8 10 3 16	1 4 2 6	9 15 1 22	12½, do.	Do.

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The above experiment goes to show, that though there will likely be a greater per centage of unsound potatoes in a crop, the stalks of which have neither been cut nor pulled, yet, on the whole, the quantity of sound will be much greater. The prevalent opinion, therefore, regarding this practice cannot be implicitly relied on.

Experiment, No. 10.—This was another experiment on the potato. It was made with the view of testing the relative productiveness of different varieties. The land was of the same quality throughout, received the same kind and quantity of manure, and was cultivated in the same manner in each case. The subjoined table contains the particulars and results in regard to it, viz. :—

No. of plot.	Variety of potato.	Date of planting.	Mode of planting.	Date of raising.	Produce per statute acre.			Per centage diseased	Manure applied per acre statute.
					Sound.	Unsound.	Total.		
					tons cwt. qr. lb.	tons cwt. qr. lb.	tons cwt. qr. lb.		
1	White Rocks,	March 8, 1854,	In drills 28 inches apart, and plants 12 inches asunder in the rows,	Oct. 10,	11 3 2 9	0 6 1 5	11 9 3 14	2¾	30 Tons farm-yard manure.
2	Walker's Earlies,	Do.	Do.	Do. 18th	9 12 1 25	0 18 2 26	10 11 0 23	9	Do.
3	American Earlies,	Do. 9th,	Do.	Do. 19th	9 19 0 13	0 15 3 7	10 14 3 20	7⅓	Do.
4	Pink Eyes,	Do.	Do.	Do.	9 6 2 20	0 3 3 2	9 10 1 92	2 nearly.	Do.
5	Kemps,	Do.	Do.	Do. 11th	9 7 3 8	0 6 2 5	9 14 1 13	3⅓	Do.

By a perusal of the foregoing returns it will be perceived that the variety denominated "White Rocks" was the most productive, and on the whole, least affected with the disease. So much has this been the case, in my own experience throughout the last few years, that I have made it a point that the great bulk of the crop should consist of this variety. It is not so fine a potato, nor so mealy in quality, as the Kemp; but it is more productive, less liable to disease, and in many other respects very little inferior.

Experiment, No. 11.—This was instituted for the purpose of ascertaining the relative efficacy of a variety of manures in the production of the Swedish turnip. Unfortunately, however, the crop became diseased with *finger and toes* to an almost unprecedented extent, and thus rendered it almost impossible to arrive at any definite conclusions in reference to it. A record of the trial, however, may prove interesting, and therefore I furnish it in the annexed table.

[TABLE.

TABLE showing results of Experiment, No. 11.

No. of Plot.	Kind of Turnip.	Date of Sowing.	Date of Saving.	Mode of Sowing.	Produce per Statute Acre.			Kind of Manure applied per Statute Acre.
					Roots.	Tops.	Total.	
					tons cwt. qrs. lbs.	tons cwt. qrs. lbs.	tons cwt. qrs. lbs.	
1	Skirving's improved Swede,	1854, May 29,	1855, January	In drills 30 inchs. apart and plants 13 inches asunder in the rows,	6 1 1 9	1 14 2 18	7 15 3 26	4 cwt. com. salt, 2 cwt. guano, and 1 cwt. nitrate of soda.
2	Do.,	,,	,,	Do.,	6 13 1 9	1 16 0 0	8 9 1 9	4 cwt. com. salt, 2 cwt. guano, and 1 cwt. sulphate of soda
3	Do.,	,,	,,	Do.,	8 4 0 0	2 6 2 18	10 10 2 18	5 cwt. guano.
4	Do.,	,,	,,	Do.,	5 5 1 9	1 8 2 18	6 13 3 27	10 cwt. Perry's manure.
5	Do.,	,,	,,	Do.,	5 7 1 9	0 19 1 9	6 6 2 18	5 cwt. Perry's manure.
6	Do.,	,,	,,	Do.,	6 5 1 9	1 8 0 0	7 13 1 9	12 cwt. Classon's No. 1 manure.
7	Do.,	,,	,,	Do.,	6 8 0 0	1 8 0 0	7 16 0 0	12 cwt. Classon's No. 2 manure.
8	Do.,	,,	,,	Do.,	. . .	Not weighed	. . .	12 cwt. Classon's No. 3 manure.
9	Do.,	,,	,,	Do.,	4 18 2 18	1 8 0 0	6 6 2 18	12 cwt. Classon's No. 4 manure.
10	Do.,	,,	,,	Do.,	5 91 9	1 8 0 0	6 17 1 9	12 cwt. Classon's No. 5 manure.
11	Do.,	,,	,,	Do.,	5 6 2 18	1 17 1 9	7 3 3 27	12 cwt. Classon's No. 6 manure.
12	Do.,	,,	,,	Do.,	10 1 0 19	1 17 2 16	11 18 3 7	15 tons farm-yard and 2 cwt. guano.
13	Do.,	,,	,,	Do.,	10 10 0 0	2 0 0 0	12 10 0 0	15 tons farm-yard and 5 cwt. of Perry's manure.
14	Do.,	,,	,,	Do.,	12 11 1 9	2 8 2 18	14 19 3 27	30 tons farm-yard manure.
15	Do.,	,,	,,	Do.,	5 7 1 9	1 9 1 7	6 16 2 16	No manure.

An examination of the foregoing table points out unmistakably that farm-yard manure—even under the unfavourable circumstances previously referred to—yielded the largest produce: and that the plot to which no manure was applied gave as large a return as some of those which got a very fair allowance of artificial manure.

Experiment, No. 12.—This had reference to the comparative produce which the usual varieties of field carrots would yield from different kinds of manure. The experiment was prompted by the circumstance that the carrot crop has seldom succeeded well on the farm; and it was therefore considered advisable to give it a trial with farm-yard manure, in different quantities—mixed with other manurial substances. The following table furnishes the particulars and results.

TABLE showing results of Experiment, No. 12.

No. of Plot.	Variety of Carrot.	Date of Sowing.	Date of Raising.	Mode of Sowing.	Produce per Statute Acre.			Manure applied per Statute Acre.
					Roots.	Tops.	Total.	
					tons cwt. qrs. lbs.	tons cwt. qrs. lbs.	tons cwt. qrs. lbs.	
1	Altringham,	1854, April 1	1854, Dec. 6	In drills 28 in. apart,	4 19 3 12	2 1 3 23	7 1 3 7	35 tons farm-yard, and a mixture of 6 bushels of common salt and 6 of soot.
2	Orange,	,,	,,	Do.,	7 15 1 23	3 9 1 11	11 4 3 6	Do.
3	White Belgian	,,	,,	Do.,	9 10 0 14	4 11 2 7	14 1 2 21	Do.
4	Do.,	,,	,,	Do.,	10 0 2 0	4 0 2 0	14 1 0 0	35 tons farm-yard, only.
5	Do.,	,,	,,	Do.,	. . .	Not taken.	. . .	17½ tons farm-yard, and a mixture of 6 bushels of common salt, and 6 of soot.
6	Do.,	,,	,,	Do.,	5 1 0 0	1 12 0 0	6 13 0 0	12 bushels soot, and 12 common salt, mixed.
7	Do.,	,,	,,	Do.,	3 7 2 1	1 1 2 4	4 9 0 25	No manure.

The variety of carrot which yielded the heaviest return in the above experiment was the white Belgian; and the kind of manure which produced the best, at the cheapest cost, was farm-yard—applied in full quantity. The opinion generally entertained that common salt and soot—mixed—prove exceedingly useful to the carrot crop, was certainly not confirmed by the results obtained from their application in this case.

Experiment, No. 13.—This had relation to the amount of acreable produce which the common varieties of mangel wurzel would yield from farm-yard manure, applied in equal quantities. The subjoined table affords the results, viz.:—

No. of Plot.	Variety of Mangel.	Date of Sowing.	Date of Raising.	Mode of Sowing.	Produce per Statute Acre.			Manure applied per Statute Acre.
					Roots.	Tops.	Total.	
					tons cwt. qrs. lbs.	tons cwt. qrs. lbs.	tons cwt. qrs. lbs.	
1	Yellow globe,	1854, Apl. 27	1854, Nov. 27	In drills 30 inches apart—plants 13 in. asunder in the rows.	28 13 2 0	12 6 0 26	40 19 2 26	30 tons farm-yard.
2	Long red,	Do.,	Do.,	Do.,	18 19 2 2	9 17 1 11	28 16 3 13	Do.
3	Red globe,	Do.,	Nov. 30	Do.,	27 13 0 27	10 18 0 21	38 11 1 20	Do.
4	Long yellow,	Do.,	Do.,	Do.,	19 13 3 25	9 14 1 23	29 8 1 20	Do.

It will be seen that the yellow and red globe varieties produced, respectively, the heaviest return, both as regard roots and tops.

Experiment, No. 14.—This experiment was made with the view of testing the efficacy of Messrs. Classon and Perry's manures, as compared with farm-yard manure and guano. The following results were obtained.

TABLE showing results of Experiment, No. 14.

No. of Plot.	Kind of Crop.	Produce per Statute Acre.												Manure applied per Statute Acre.
		Roots.				Tops.				Total.				
		tons.	cwt.	qrs.	lbs.	tons.	cwt.	qrs.	lbs.	tons.	cwt.	qrs.	lbs.	
1	Yellow globe mangel,	24	14	3	4	Not taken.				—				30 tons farm-yard.
2	Ditto,	25	16	2	18	10	1	1	26	35	18	0	17	15 tons farm-yard, and 5 cwt. Perry's manure.
3	Ditto,	25	12	2	0	11	0	3	9	36	13	1	9	15 tons farm-yard, and 2½ cwt. guano.
4	Ditto,	22	7	3	18	11	12	1	4	34	0	0	23	10 cwt. of Perry's manure.
5	Ditto,	18	19	0	18	11	14	1	14	30	13	2	4	5 cwt. ditto.
6	Ditto,	20	4	0	18	11	11	1	0	31	15	1	18	5 cwt. guano.
7	Ditto,	Data for cal				culating the fully noted.				produce not				12 cwt. of Classon's No. 1 manure.
8	Ditto,	17	15	0	23	9	13	3	0	27	8	3	23	12 cwt. of Classon's No. 3 manure.
9	Ditto,	23	13	0	19	12	13	2	17	36	6	3	8	12 cwt. of Classon's No. 4 manure.

A review of the foregoing returns shows that only a slight difference of produce resulted from half farm-yard manure with five cwt. of Perry's, and half farm-yard manure with two and a-half cwt. of guano.

Also, the produce from a full allowance of farm-yard manure (plot No. 1) stands second on the list in point of weight—an occurrence which is rather unusual—as in general it stands first.

Again, by comparing the returns from plots 9, 4, and 6 with each other, it will be perceived that twelve cwt. of Classon's No. 4 manure produced a heavier produce, than either ten cwt. of Perry's or five cwt. of guano; and that as regards the two latter, Perry's took the lead.

Further, a comparison of plots 5 and 8 shows, that five cwt. of Perry's manure produced a heavier crop, than twelve cwt. of Classon's No. 3.

On the whole, the effect produced by Perry's manure, in this experiment, speaks favourably on behalf it.

Experiment, No. 15.—This was instituted with the view of ascertaining the relative effect of farm-yard manure and vitriolized bone compound, and farm-yard manure and guano, in the production of Swedish turnips. The field on which the experiment was carried out, and which was recently rented, had been in grass for a number of years previously; and had been laid down by the former occupant in an extremely dirty state. To prepare it properly, therefore, for a crop of turnips, in the spring season of the year, was impracticable; and consequently, it was not well suited for the purpose intended. Necessity, however, compelled its selection. The seed was sown on the 20th June—at too late a season to expect a heavy return—and the mode of cultivation was the same as that usually pursued. The following table shows the returns, viz.:—

TABLE showing results of Experiment, No 15.

No. of Plot.	Kind of Crop.	Produce per Statute Acre.												Manure applied per Statute Acre.
		Roots.				Tops.				Total.				
		tons,	cwt.	qrs.	lbs.	tons,	cwt.	qrs.	lbs.	tons,	cwt.	qrs.	lbs.	
1	Skirving's improved Swede.	17	3	0	4	3	8	0	7	21	1	0	11	24 tons farm-yard, and 2½ cwt. guano.
2	Ditto,	16	8	0	26	3	0	1	10	19	8	2	8	24 tons farm-yard, 4 cwt. vitriolized bone compound.
3	Ditto,	8	7	0	19	2	14	2	23	11	1	3	14	No manure.

It will be perceived by an examination of the foregoing tabulated returns, that farm-yard manure and guano produced a rather heavier crop than farm-yard manure and vitriolized bone compound. Both applications, however, constitute manure of exceedingly fertilizing properties; and unless in very unfavourable circumstances, scarcely ever produce disappointment. The returns given are comparatively small, but for the reasons previously stated, this was to be expected.

Experiment No. 16.—This was made on a part of the same field as that on which the preceding experiment was carried out; consequently, the circumstances mentioned in reference to it operated in a somewhat similar manner in regard to this case also. The object of this experiment was to test the productive powers of different descriptions of manure in the growth of Aberdeen turnips; and though the produce, in each case, was comparatively low, yet, as all the separate plots got the same treatment, &c., the results may be taken as sufficiently accurate tests of the fertilizing properties of the different manures used. The following table affords a record of the results, viz. :—

No. of Plot.	Kind of Crop.	Produce per Statute Acre.												Manure applied per Statute Acre.
		Roots.				Tops.				Total.				
		tons,	cwt.	qrs.	lbs.	tons,	cwt.	qrs.	lbs.	tons,	cwt.	qrs.	lbs.	
1	Aberdeen turnips.	6	17	1	12	3	9	1	24	10	6	3	8	No manure.
2	Ditto,	11	12	3	14	3	17	2	14	15	10	2	0	30 tons farm-yard.
3	Ditto,	10	4	2	13	5	3	0	6	15	7	2	19	8 cwt. of the urate of the London Manure Company.
4	Ditto,	8	8	3	0	3	0	2	14	11	9	1	14	8 cwt. vitriolized bone compound.
5	Ditto,	9	10	3	25	4	13	0	26	14	4	0	23	4 cwt. guano.
6	Ditto,	7	5	8	13	3	12	0	20	10	18	0	5	4 cwt. Lawes' superphosphate.
7	Ditto,	6	8	1	12	3	17	2	7	10	5	3	7	11 cwt. Perry's Manure.

It will be seen from the above statistical table, that farm-yard manure produced the highest return; the urate of the London Manure Company the next; guano the next; vitriolized bone compound the next; Lawes' superphosphate the next; and Perry's manure the next. Heretofore I had very little experience of the urate of the London Manure Company, but from the above trial I am disposed to consider it a rich and valuable fertilizer.

The foregoing experiments comprise all those which were carried

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out with accuracy. A few others were made, but slight errors having occurred in their management, I have suppressed them altogether. Amongst those thus suppressed, there was one attempted which I intended should receive particular attention, viz.:—the growth of turnips or mangel wurzel at different distances; but in the course of its management I discovered an error which induced me at once to abandon it.

As usual, pleura-pneumonia made occasional inroads on the cattle, but, with this exception, no other casualties of importance occurred. This is a scourge which I believe no human foresight can completely ward off; nor, when it has reached a certain stage, veterinary skill overcome.

Appended to this Report are a few of the entries in the Visitors' Book, a list of the pupils who left, a general statistical summary of the cropping of 1854, and the result of the transactions during a period of seventeen months, to all of which I beg respectfully to invite your attention.

John Donaghy.

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Albert Agricultural Institution.

NAMES of AGRICULTURAL PUPILS and TEACHERS who left the ALBERT AGRICULTURAL TRAINING INSTITUTION, GLASNEVIN, between 1st November, 1853, and 31st March, 1855, inclusively.

No.	Names of Pupils and Teachers.	Date of entrance of Pupils and Teachers.	Date of leaving of Pupils and Teachers.	Destination on leaving.
			1853.	
1	Robert Hunter	May 13, 1853	Nov. 7	Went home.
2	Michael O'Driscoll	Re-admitted Jan. 4, 1853	Nov. 17	Went home.
3	John Coakley	Feb. 10, 1852	Nov. 21	Enlisted in the Corps of Sappers and Miners.
4	Patrick Donegan	Feb. 29, 1852	Nov. 21	Enlisted in the Corps of Sappers and Miners.
5	Michael Cottrell	April 1, 1853	Nov. 21	Enlisted in the Corps of Sappers and Miners.
6	James Wiggins	August 5, 1852	Nov. 26	Enlisted in the Corps of Sappers and Miners.
7	Michael Ambrose	April 12, 1853	Dec. 24	Stated that he was going home.
			1854.	
8	George Hunter	Dec. 31, 1852	Jan. 5	Went to the United States, N. A.
9	John Norton	Jan. 9, 1854	Jan. 20	Went home.
10	Terence M'Gowan	May 13, 1853	Jan. 16	Went home.
11	James Herbert	Feb. 4, 1853	Jan. 30	Went home.
12	Samuel Bell	March 3, 1852	Feb. 3	Agriculturist at Dunmanway District Model School.
13	Patrick Stephens	May 1, 1851	Feb. 6	Agriculturist at Kyle Park Model Farm.
14	James Graham	Feb. 20, 1852	Feb. 21	Went home.
15	Laughlin Ryan	Jan. 18, 1854	Feb. 28	To teach an agricultural school.
16	Bernard Kilkelly	July 9, 1852	March 15	Appointment as overseer of drainage.
17	Bernard Kearney	March 9, 1852	March 23	Went home.
18	William Boyle	Re-admitted Feb. 3, 1854	March 25	Agriculturist at Derrycastle Agricultural School.
19	John Hughes	May 20, 1852	April 26	Went home.
20	Thomas Doyle	May 5, 1852	May 9	Went home.
21	John M'Kelvey	May 1, 1854	May 23	Went home.
22	Francis O'Higgins	March 22, 1854	May 25	Went home.
23	Thomas Bourke	June 5, 1852	June 6	Went home.
24	Richard Macken	Feb. 20, 1854	June 6	Went home owing to indisposition.
25	James Bourke	April 22, 1854	June 20	Went home.
26	Denis Dullea	Re-admitted Dec. 7, 1853	June 28	Agriculturist at Mitchelstown Poor Law Union.
27	John Fitzgerald	June 14, 1852	July 7	Went home.
28	Patrick Ward	Feb. 20, 1854	July 17	Went home.
29	Edward Doran	August 7, 1852	August 9	Went home
30	John M'Mahon	October 5, 1852	August 25	Went home.
31	Thomas Palmer	August 25, 1852	August 29	Went home.
32	John Kerr	Dec. 3, 1852	August 29	Went to Mr. Campbell to learn gardening.
33	James Heavey	August 18, 1854	August 28	Went home on the recommendation of the doctor (Dr. M'Cready).
34	Thomas Collins	Sept. 7, 1852	Sept. 9	Went home to farm on his own account.
35	John Johnstone	March 31, 1853	Sept. 9	Went home.
36	John Wilson	Feb. 20, 1854	Sept. 11	Went home.
37	Thomas Barnes	Re-admitted Dec. 17, 1852	Sept. 30	Went home.
38	Patrick M'Grath	Jan. 27, 1853	October 23	Went home on account of his father's illness.
39	Timothy Casey	October 15, 1852	October 24	Went home.
40	Patrick Maloney	October 20, 1852	October 24	Went home.
41	Thomas Jordan	Nov. 20, 1852	Nov. 29	Went home.
42	Jeremiah M'Mahon	Nov. 23, 1852	Nov. 29	Went home.
43	James M'Cann	Feb. 20, 1854	Dec. 20	Went home.
44	John Hynes	Dec. 21, 1852	Dec. 23	Went home.
45	Peter Prendergast	June 6, 1853	Dec. 25	Went home.
46	James Byrne	Re-admitted Sept. 13, 1854	Dec. 25	Went home.
47	Adam Roche	Dec. 29, 1852	Dec. 29	Went home.
			1855.	
48	Henry Clarke	Jan. 11, 1853	Jan. 3	Appointed to Derrycastle Agricultural School, as agriculturist.
49	Thomas M'Cabe	Sept. 1, 1853	Jan. 12	Agriculturist to Bath Model Farm.
50	Hugh Lynch	Feb. 14, 1853	Jan. 22	Went home.
51	John Hayes	October 26, 1853	Jan. 24	Left without reporting.
52	John Owens	June 27, 1851	Jan. 27	Agricultural teacher.
53	Thomas Manley	Dec. 21, 1852	Feb. 26	Agriculturist to the Kilkenny Model Farm.
54	William Glindon	March 8, 1854	March 4	Do not know.
55	Philip Germaine	Feb. 20, 1854	March 5	Do not know.
56	James Pristo	Feb. 8, 1854	March 7	To manage business for H. R. H. Prince Albert.
57	John M'Feeley	July 1, 1854	March 12	Appointed as an agricultural teacher.
58	Thomas M'Gloin	Feb. 20, 1854	March 16	Went home.
59	Francis Ryan	Jan. 3, 1854	March 30	Went home.
60	James Armstrong	Feb. 20, 1854	March 31	To Jamaica, as an apprenticed planter.

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TABULATED RETURN of the CROPPING of the ALBERT AGRICULTURAL INSTITUTION, GLASNEVIN, for the year ending 31st October, 1854.

Crops cultivated.	A. R. P.	Extent of ground under each, statute measure. A. R. P.	Sowed or Planted.	Seed, per statute acre.	Time of reaping, lifting, or saving.	Average produce per statute acre.	Observations.
WHEAT, viz.:—							
Fenton,	5 0 28	—	Nov. 19, 1853,	Drilled, 5 st.; broadcast, 11 stones,	August 29, 1854,	9 brls. of 20 stones each.	The Fenton was a tolerably fair crop, but the Uxbridge was a very poor one.
Uxbridge,	8 1 38	—	March 18, 1854,	Drilled, 4 st.; broadcast, 8 stones,	September 16, „	5 barrels and 16 st.	
		13 2 26					
OATS, viz.:—							
Russian Dun,	4 1 14	—	Oct. 22, 1853,	Broadcast, 8 stones,	August 26, „	11 brls. 9 st. 4 lbs.	A good crop.
Black Tartary,	6 2 21	—	March 10, 1854,	Drilled, average 5½ st.	August 25, „	15 brls. 7 st. 4 lbs.	Crop excellent.
Hopetoun,	4 1 29	—	April 12, „	Broadcast, 8 stones,	September 15, „	Not taken,	A good crop.
Do.	0 3 22	—	April 12, „	Do. Do.	September 16, „	Do.	Do.
Do.	4 0 24½	—	March 22, „	Drilled, 5 stones,	August 30, „	10 brls. 8 st. 7 lbs.	Do.
Do.	5 0 24½	—	March 21, „	Broadcast, 10 stones,	August 30, „	10 brls. 11 st. 7 lbs.	A good crop; produced 3 stones per acre more than the drilled.
Potato Oats,	8 0 13	—	March 23, „	Drilled, 5 stones,	September 1, „	Not taken,	Crop very good.
		33 2 28					
BARLEY, viz.:—							
Chevalier,		1 1 5	May 8, „	Drilled, 9 stones,	August 31, „	Do.	A tolerably fair crop.
Flax, Riga,		1 0 0	May 4, „	Broadcast, 3 bushels,	September 9, „	Not yet taken,	Of medium quality.
POTATOES, viz.:—							
White Rocks,	2 3 34	—	March 8, „	18½ cwt.	October 0, „	11 ts. 3½ cwt. sound,	Crop excellent; only 2¾ per cent. diseased.
Kemps,	0 0 26½	—	March 9, „	12 cwt. 1 st. 3 lbs.	October 11, „	9 ts. 7¾ cwt. do.	Do. Do.
American Bangors,	0 0 26½	—	March 9, „	10 cwt. 6 st. 5 lbs.	October 10, „	7 ts. 5 cwt. do.	6 per cent. unsound on an average.
Walker's Earlies,	0 0 26½	—	March 9, „	11 cwt. 1 st. 3 lbs.	October 18, „	9 ts. 12½ cwt. do.	9 per cent. unsound.
American Earlies,	0 0 26½	—	March 9, „	8 cwt. 5 st.	October 19, „	9 ts. 19 cwt. do.	7½ per cent. unsound.
Pink Eyes,	0 0 26½	—	March 9, „	9 cwt. 4 st. 11 lbs.	October 19, „	9 ts. 6½ cwt. do.	2 per cent. unsound.
White Rocks (experimental plots),	0 1 28½	—	April 15, „	14 cwt.	October 20, „	Not taken correctly	Not taken correctly.
Different varieties,	0 2 16	—	April 22, „	13 cwt.	November 2, „	Not taken,	An average crop.
		4 3 10					

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TURNIPS, viz.:—							
Swedes (manured in the usual way),	8 0 0	—	From May 18 to June 20, 1854,	4 lbs.	In December, 1854,	17½ tons average,	A very poor crop. The roots suffered greatly from the disease called finger-and-toes. No manure was applied on a portion of the ground, with the view of comparing the produce with that of the manured part.
Swedes (with artificial manure),	1 2 38	—	Do.	4 lbs.	In December, „	7 tons do.	
Swedes (without manure),	0 1 11½	— 10 0 9	Do.	4 lbs.	In December, „	7 ts. 18 cwt. do.	
Aberdeens (experimental plots),		3 3 6½	July 1, 1854,	4 lbs.	As required, up to 10th January, 1855,	9 tons do.	A very inferior crop.
Mangel Wurzel,		7 2 33	From May 9 to May 18, 1834,	5 lbs.	Occasionally from Nov. 27, to January 4,	24 tons,	A good crop.
White Silesian Beet,		0 0 13	April 27, „	3½ lbs.	December 5, 1854,	18 tons 13 cwt.	Do.
Kohl Rabi,		0 0 28	April 27, „	3½ lbs.	January 26, 1855,	Not taken,	A fair crop.
Parsnips,		0 0 38	April 1, „	6 lbs.	January 25, 1855,	Do.	A poor crop.
Carrots,		0 3 27	April 1, „	6 lbs.	December 8, 1854,	7 tons,	Do.
VETCHES, viz.:—							
Spring,	1 1 20	—	Feb. 15, „	3 bushels vetches, and 1 bushel oats,	Used in July, 1854,	19 tons 10 cwt.	An excellent crop.
Winter,	1 2 0	— 2 3 20	Sept. 25, 1853,	Do. Do.	Used in latter part of May, and in June,	13 tons 5 cwt.	A good crop.
Cabbage,		1 1 4	Part on October 3, 1853, and part on June 14, 1854,	—	In July, 1854, and latter part of Autumn,	Not taken,	Do.
Beans (Russian or Winter),		4 1 18	Nov. 10, 1853,	1½ bushels,	September 27, 1854,	7 brls. 3 st. 6 lbs. of 20 st. to the barrel.	A tolerably fair crop, but attacked with the aphidae.
Rape,		6 1 34	At different periods, from Sept. 29, 1853, to Aug. 21, 1854,	Drilled 4 lbs.; broadcast, 10 lbs.	Greater part not fit for use on 1st November, 1854,	—	
Rye,		1 0 0	Sept. 30, 1853,	10 stones,	Not allowed to come to perfection, in consequence of a change of cropping on this part of the farm.	Not taken,	A very promising crop.
Chicory,		0 0 14	July 4, 1854,	4 lbs.	—	Do.	A very poor crop.

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Albert Agricultural Institution.

Tabulated Return of the Cropping of the Albert Agricultural Institution, Glasnevin—*continued.*

Crops cultivated.				Extent of ground under each, statute measure.			Sowed or Planted.	Seed, per statute acre.	Time of reaping, lifting, or saving.	Average produce per statute acre.	Observations.
	A.	R.	P.	A.	R.	P.					
Italian Rye-grass, viz.:—											
In Field No. 3, Five-crop, . . .	1	0	0	—			Previous year, .	Given in last Report,	Four separate cuttings, viz., May 11, June 12, Aug. 4, and Sept. 27,	33 ts. 9 cwt. 1 qr. 24 lbs., in a green state,	Liquid manure applied copiously by steam power.
In Do. Do. .	3	2	23	—			Do. . . .	Do. . .	Two separate cuttings, viz., May 11 and June 12,	5½ tons in a green state,	Got no manure of any kind as top-dressing.
In Field No. 1, Alternate Course, .	4	1	27	—			Do. .	Do. . .	Cut for soiling occasionally; two cuttings,	8 tons in a green state,	Do. Do.
In Do. Do. Three-crop, . . .	6	2	21	—			March 29, 1854, without a corn-crop,	3½ bushels, . .	Cut three times, viz., July 22, Aug. 31, and October 24,	26 ts. 9 cwt. 2 qrs., in a green state,	Only a small portion of the field got liquid manure. An exceedingly good crop.
In Field No. 2, Four-crop, ...	9	0	26	—			Previous year, .	Given in last Report,	Cut once, viz., July 11,	4 tons 10 cwt. in a green state,	A very poor crop.
				24	3	17					
Pasture and meadow, . . .				44	3	26	In 1851, . .	Previously given, as regards the portion of this crop contained in the old farm,	Grazed, . . .	Don't know, .	Tolerable grass.

Note.—The vegetable gardens, nursery grounds, lawns, borders, sites of buildings, yards, roads, &c., are not taken into account in the above table.

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Glasnevin Industrial School.

2. GLASNEVIN INDUSTRIAL NATIONAL SCHOOL.

March, 1855.

I. *Industrial Class.*—This class at present consists of seventeen boys, from ten to eighteen years of age, who are employed two hours each day, after the ordinary school business, in the cultivation of the gardens; and their uniform good conduct, and very great attention to the several duties of the literary and industrial departments, have, on all occasions, afforded me much pleasure and entire satisfaction. So great has been the desire of the children to become members of the class, that I was induced to increase the number from twelve to fifteen, and subsequently to seventeen pupils, in order to enable me to meet the numerous applications for admission.

II. *Agricultural Class.*—The Agricultural Class at present consists of thirty boys, selected from the Fifth, Fourth, Third, and Sequel classes. They receive agricultural instruction half an hour each day—on Mondays, Wednesdays, and Fridays—and are taken to the gardens to witness the different operations and preparatory processes of any practical utility; and thus from personal observation, and by taking an active part in the work, they become permanently impressed with a correct system of improved management.

III. *Courses of Cropping pursued.*—The "three," "four," and "six" course rotations have been carried out in the different gardens with great success: the three and four in the allotment gardens, the four in the lower gardens in immediate connexion with the training establishment, and the six on the school or model gardens.

DIAGRAM illustrating the SIX-COURSE ROTATION pursued in the School or Model Garden.

A.—In March sow parsnips and carrots in drills fourteen inches apart, and in April sow red beet. When taken off in October, clean, manure, fork over, and plant the ground with Nonpareil, of the August sowing, twenty-eight inches by fourteen inches in the line.

B.—*First Crop.*—Nonpareil Cabbage planted in October, twenty-eight inches by fourteen inches in the line.

Second Crop.—In March interline the cabbage in the alternate rows with beans, in double line.

Third Crop.—When the cabbage has been taken off in May, fork between, and mould the beans, and interline with cauliflowers.

Fourth Crop.—When the cauliflowers have been drawn off in July, refork between the beans, and plant out borecole, or Savoy, in double rows, between the beans, exactly in the same position as occupied by the first crop of York. As soon as the beans have been harvested, fork between, and mould the greens, or Savoys, as the case may be.

C.—General crop of onions, sown in March in four feet beds, with eighteen inch alleys. Plant the alleys with cauliflowers. When the onions are removed in the end of August, or early in September, clean, manure highly, fork over, and plant the ground with cauliflowers twenty-eight inches by eighteen inches in the line.

D.—*First Crop.*—Cauliflower, twenty-eight inches by eighteen inches in the line, taken from plants of the August sowing.

Second Crop.—In March interline the cauliflowers with potatoes; as the cauliflowers are removed, in May, fork between, and mould the potatoes.

Third Crop.—In June land potatoes, and plant between the drills flowering broccoli, two feet in the line, giving plenty of manure.

E.—Table turnips, in succession, from March. For the very early sowings select the White and Green Dutch, as they are not liable, like the others, to run to seed; but after the 20th of April, the White Stone, Malteese,

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or Orange Jelly, may be sown with safety. Where the very early sowings have been, make the July sowing of Nonpareil.

When the turnips have been removed, by September, clean, manure, fork over, and plant Nonpareil twenty-eight inches by fourteen inches in the line.

F.—*First Crop.*—Early Nonpareil Cabbages, planted in September, twenty-eight inches by fourteen inches in the line, and taken from the nursery of July sowing.

Second Crop.—In March interline the Nonpareil with very early potatoes, viz.:—Fortyfolds, Prince Regents, or Kemps. The cabbage will be ready for use in the end of April and beginning of May, and should be removed with as little delay as possible, and the potatoes forked between, and highly moulded, to encourage in them a more rapid growth.

Third Crop.—When the potatoes have been taken off in the end of June, and early in July, plant celery in drills four feet apart, and four inches in the line.

On examination of the above diagram it will be seen that thirteen full crops have been harvested on the six divisions within the same year, without interfering with the preparatory crops of the ensuing season; and, by observing a strict adherence to the rotation, a very great variety of the most useful vegetables for table shall have been cultivated. The crops succeed each other in the order of the letters by which each has been denoted; thus—A is succeeded by B, B by C, C by D, D by E, E by F, and F by A.

IV. *Pigs and Piggeries.*—Special allusion having been made to this important subject in my last report, it now remains for me to detail its practical working, and the profits accruing therefrom, to the industrial department, viz.:—

Dr. INDUSTRIAL DEPARTMENT.

1854.		£	*s.*	*d.*
May.	To six store pigs, purchased at the Albert Institution, . .	9	0	0
Dec.	,, Bran and pollard, to this date, ...	4	7	8
,,	By balance, being gain, ...	14	3	0
		£27	10	8

CONTRA. *Cr.*

1854.		£	*s.*	*d.*
Dec. 28.	By six pigs, sold in Smithfield market, ...	23	0	8
,,	,, Fifteen loads of manure, made by animals to this date, at 6*s.* per load, ...	4	10	0
		£27	10	8

The above item of £14 3*s.* may be considered as clear gain to the Commissioners, as nothing but the mere refuse, heretofore consigned to the ash-pit and manure heap, has been consumed by these animals, except the bran and pollard, noted on the debit side of the account; and as we shall be able to feed two sets of pigs each year, in future, an item for pork of £28 or £30 may be fairly estimated as an annual increase to the credit of the industrial department; thus permanently impressing on the minds of the younger pupils, by whom this department is principally managed, the great importance of *allowing nothing to go to waste, but that every thing should be turned to a useful and a profitable purpose.* The labour of even the youngest children has been employed also with advantage, when not required for other purposes, in collecting, cleaning, cutting, and cooking all the available vegetable refuse of the entire gardens for feeding.

V. *Allotment System.*—This department continues to work with the usual successful and satisfactory results, as may be seen on reference to its several accounts attached to the balance sheet of the entire industrial department. Allotments A and C, held in 1853, by Walker and

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Byrne, were transferred, in the commencement of 1854, to Hussey and Toole, ordinary pupils of the garden class—Walker having obtained a clerkship in the Liverpool and Dublin Steam Packet Company office; and Byrne, in order to attend, in the evenings, the School of Design, in Kildare-street, had to resign his place as allotment pupil.

VI. *Balance Sheet.*—By an inspection of this sheet it will be found that the largest items have been expended on labour, cart-hire, and fees to pupils, viz.:—for labour and cart-hire £56 17*s.* 4*d.*, and fees paid pupils £14 17*s.* 6*d.*, which items, increased by £8 15*s.* 4½*d.* (balance in favour of the industrial department), become £80 10*s.* 2½*d.*, a statute-acreable profit of £40 18*s.* 7*d.* to a small holder, who, *having a sufficient labour within himself and family*, would not have to incur expenses of a similar outlay. Again, should we omit the valuations taken in the end and commencement of the year, we shall find the amount of receipts, £104 11*s.* 8*d.*, exceed the expenses, £112 8*s.* 3½*d.*, "minus" £71 14*s.* 10*d.* (the sum paid for labour, cart-hire, and pupils' fees) by £63 17*s.* 2½*d.*—proving, to a demonstration, what may be realized upon a small holding by an industrious and thrifty family, provided the conjoint labours of its members be directed and employed with judgment, skill, and economy.

Walter Hawe, Teacher.

Tabulated Summary of Allotment Accounts.

Allotment.	Extent.	Expenditure.			Receipts.			Profits.					
								Total.			Acreable.		
	Perches.	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
A.—John Flood, . .	12	0	18	9	3	10	1½	2	17	8½	38	10	0
B.—Joseph Toole, . .	11	1	2	2	2	8	3½	1	17	3	27	1	9
C.—Stephen Hussey, .	11	0	18	7½	2	12	1½	1	7	7½	20	1	8
D.—James Flood, . .	12	0	16	10½	3	6	10½	2	3	1	28	14	4
E.—John Shorte, : .	10	0	19	10	2	18	9	2	2	2½	33	15	4
F.—Thomas M'Dermott,	10	0	17	5	2	6	2	2	0	6½	32	8	8
Total, . .	66	5	13	8	17	2	4	12	8	5	30	2	2
											Average acreable profit.		

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ALLOTMENT A, containing 12 statute perches; JOHN FLOOD, holder.

Dr. ALLOTMENT A.

1854.	Stock.	£	s.	d.
December 31,	To 56 stone Swedish turnips, at 4*d*. per, .	0	18	8
,,	,, 28½ dozen cabbages, at 3*d*. per, . .	0	7	10½
March 6,	,, 2 stone seed potatoes, at 6*d*. per, . .	0	1	0
March 25,	,, 168 Dutch plants, ...	0	0	4½
,,	,, 1 load manure, ...	0	4	0
March 28,	,, ½ lb. jelly turnip seed, . . .	0	0	4½
June 3,	,, ¼ lb. Swedish do., ...	0	0	3
July 20,	,, 200 Borecole plants, ...	0	0	6
,,	,, 50 Savoy plants, ...	0	0	1½
,,	,, Ashes, ...	0	2	6
October 21,	,, 400 Nonpareil plants, ...	0	1	0
,,	,, 1 load manure, ...	0	4	0
December 31,	,, Rent of 12 statute perches, at £5 per Irish acre, ...	0	4	7½
	Total, ...	2	5	3½
	To Balance in favour of allotment at close of year,	2	17	8½
		5	3	0

CONTRA. *Cr.*

1854.		£	s.	d.
February 28,	By 56 stone Swedish turnips, at 4*d*. per, .	0	18	8
April 1,	,, 28½ dozen Savoy cabbages, at 3*d*. per, .	0	7	1½
,,	,, Sprouts, ...	0	1	0
May 15,	,, 26½ dozen Nonpareil, at 4*d*. per, . .	0	8	10
August 23,	,, 14 dozen Dutch cabbage, at 8*d*. per, . .	0	9	4
August 27,	,, 23 stone potatoes, at 6*d*. per, . . .	0	11	6
September 25,	,, 20 bunches stone turnips, at 4*d*. per, .	0	6	8
October 3,	,, 23 do. at 3*d*. per, .	0	5	9
December 9,	,, 5 dozen Savoy cabbages, at 3*d*. per, . .	0	1	3
	Stock and value in allotment this date, .	3	10	1½
December 31,	By 51 stone Swedish turnips, at 4*d*. per, .	0	17	0
,,	,, 20 dozen Borecole cabbage, at 6*d*. per, .	0	10	0
,,	,, 23½ dozen Nonpareil do., at 3*d*. per, . .	0	5	10½
		1	12	10½
	Total, ...	5	3	0

ALLOTMENT B, containing 11 statute perches JOSEPH TOOLE, holder.

Dr. ALLOTMENT B.

1854.	Stock.	£	s.	d.
December 31,	To 48 stone Swedish turnips, at 4*d*. per,	0	16	0
,,	,, 19½ dozen Savoy cabbage, at 3*d*. per,	0	4	10½
March 4,	,, 2 stone seed potatoes, at 6*d*. per,	0	1	0
March 14,	,, 168 Dutch plants,	0	0	4½
,,	,, 1 load manure,	0	4	0
May 29,	,, ¼ lb. Swedish turnip seed,	0	0	3
,,	,, 1 load manure,	0	4	0
June 3,	,, ¼ lb. jelly turnip seed,	0	0	4½
July 14,	,, 250 Borecole plants,	0	0	7½
,,	,, Ashes,	0	2	6
November 22,	,, 315 Nonpareil plants,	0	0	9½
,,	,, 1 load manure,	0	4	0
December 30,	,, Rent of 11 statute perches, at £5 per Irish acre,	0	4	3
	Total,	2	3	0½
	To balance in favour of allotment at close of year,	1	17	3
		4	0	3½

CONTRA. *Cr.*

1854.		£	s.	d.
February 25,	By 48 stone Swedish turnips, at 4*d*. per,	0	16	0
March 8,	,, 19½ dozen Savoy cabbages, at 3*d*. per,	0	4	10½
,,	,, Sprouts,	0	1	0
May 5,	,, 25 dozen Nonpareil, at 4*d*. per,	0	8	4
July 18,	,, 18 stone potatoes, at 6*d*. per,	0	9	0
,,	,, 2 do., small, at 1½*d*. per,	0	0	3
October 28,	,, 14 bunches stone turnips, at 3*d*. per,	0	3	6
November 4,	,, 16 do. at 4*d*. per,	0	5	4
	Stock and value in allotment this date,	2	8	3½
December 31,	By 48 stone Swedes, at 4*d*. per,	0	16	0
,,	,, 19½ dozen Borecole, at 6*d*. per,	0	9	9
,,	,, 25 dozen Nonpareil, at 3*d*. per,	0	6	3
		1	12	0
	Total,	4	0	3½

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Allotment C, containing 11 statute perches; Stephen Hussey, holder.

Dr. — Allotment C.

1854.	Stock.	£	s.	d.
December 31,	To 36 stone Swedes, at 4*d*. per,	0	12	0
,,	,, 23½ dozen Savoy cabbage, at 3*d*. per,	0	5	10½
March 7,	,, 2 stone seed potatoes, at 6*d*. per,	0	1	0
,,	,, 1 load manure,	0	4	0
March 25,	,, 147 Dutch plants,	0	0	4½
,,	,, 1 load manure,	0	4	0
May 20,	,, ¼ lb. Swedish turnip seed,	0	0	3
,,	,, 1 load manure,	0	4	0
June 3,	,, ¼ lb. jelly turnip seed,	0	0	9
December 31,	,, Rent of 11 statute perches, at £5 per Irish acre,	0	4	3
	Total,	1	16	6
	To balance in favour of allotment at close of year,	1	7	7½
		3	4	1½

Contra. — *Cr.*

1854.		£	s.	d.
February 4,	By 36 stone Swedes, at 4*d*. per,	0	12	0
April 1,	,, 23½ dozen Savoys, at 3*d*. per,	0	5	10½
,,	,, Sprouts,	0	1	0
July 3,	,, 13 stone potatoes, at 8*d*. per,	0	8	8
,,	,, 2 do., small, at 1½*d*. per,	0	0	3
April 30,	,, 12 dozen Dutch cabbages, at 8*d*. per,	0	8	0
,,	,, 1 load manure,	0	4	0
October 21,	,, 16 bunches turnips, at 3*d*. per,	0	4	0
November 11,	,, 25 do., at 4*d*. per,	0	8	4
	Stock and value in allotment this date,	2	12	1½
December 31,	By 36 stone Swedes, at 4*d*. per,	0	12	0
	Total,	3	4	1½

ALLOTMENT D, containing 12 statute perches; JAMES FLOOD, holder.

Dr. ALLOTMENT D.

1854.	Stock.	£	s.	d.
December 31,	To 56 stone Swedes, at 4*d*. per,	0	18	8
March 26,	,, 147 Dutch plants,	0	0	4½
,,	,, 1 load manure,	0	4	0
May 24,	,, ½ lb. stone turnip seed,	0	0	4½
,,	,, ½ lb. jelly turnip seed,	0	0	4½
,,	,, Ashes,	0	2	6
May 25,	,, 500 Nonpareil plants,	0	1	3
,,	,, Ashes,	0	2	6
August 4,	,, 370 Borecole plants,	0	0	10½
December 31,	,, Rent of 12 statute perches, at £5 per Irish acre,	0	4	7½
	Total,	1	15	6½
	To balance in favour of allotment at close of year,	2	3	1
		3	18	7½

CONTRA. *Cr.*

1854.		£	s.	d.
February 11,	By 56 stone Swedes, at 4*d*. per,	0	18	8
,,	,, Sprouts,	0	1	0
April 25,	,, 28½ dozen Savoy cabbages, at 3*d*. per,	0	7	1½
June 3,	,, 26 dozen Nonpareil do., at 4*d*. per,	0	8	8
July 10,	,, 37 do. do., at 3*d*. per,	0	9	3
September 2,	,, 12 dozen Dutch do., at 8*d*. per,	0	8	0
November 4,	,, 30 bunches stone turnips, at 3*d*. per,	0	7	6
November 10,	,, 20 do. do., at 4*d*. per,	0	6	8
	Stock and value in allotment this date,	3	6	10½
December 31,	By 18 dozen Borecole, at 6*d*. per,	0	9	0
,,	,, 11 dozen Savoy, at 3*d*. per,	0	2	9
		0	11	9
	Total,	3	18	7½

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ALLOTMENT E, containing 10 statute perches; JOHN SHORTE, holder.

Dr.	ALLOTMENT E.			
1854.	Stock.	£	s.	d.
December 31,	To 40 stone Swedes, at 4*d.* per,	0	13	4
,,	,, 29½ dozen Savoy, at 3*d.* per,	0	7	4½
March 14,	,, 2 stone seed potatoes, at 6*d.* per,	0	1	0
March 17,	,, 500 York plants,	0	1	3
,,	,, 1 load manure,	0	4	0
May 20,	,, ¼ lb. jelly turnip seed,	0	0	9
July 2,	,, 450 Borecole plants,	0	1	1½
,,	,, Ashes,	0	2	6
July 14,	,, 270 Savoy plants,	0	0	7½
October 4,	,, 300 Nonpareil plants,	0	0	9
,,	,, 1 load manure,	0	4	0
December 31,	,, Rent of 10 statute perches, at £5 per Irish acre,	0	3	10
	Total,	2	0	6½
	To balance in favour of allotment at close of year,	2	2	2½
		4	2	9

	CONTRA.			*Cr.*
1854.		£	s.	d.
March 4,	By 40 stone Swedes, at 4*d.* per,	0	13	4
April 15,	,, 29½ dozen Savoy, at 3*d.* per,	0	7	4½
June 10,	,, 40 dozen Nonpareil, at 3*d.* per,	0	10	0
July 13,	,, 13 stone potatoes, at 8*d.* per,	0	8	8
September 16,	,, 28 bunches stone turnips, at 4*d.* per,	0	9	4
October 2,	,, 16 do. do., at 3*d.* per,	0	4	0
October 9,	,, 23½ dozen Savoy cabbage, at 3*d.* per,	0	5	10½
	Stock and value in allotment this date,	2	18	9
December 31,	By 37½ dozen Borecole, at 6*d.* per,	0	18	9
,,	,, 21 dozen Nonpareil, at 3*d.* per,	0	5	3
		1	4	0
	Total,	4	2	9

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ALLOTMENT F, containing 10 statute perches; THOMAS M'DERMOTT, holder.

Dr.	ALLOTMENT F.			
1854.	Stock.	£	s.	d.
December 31,	To 33 stone Swedes, at 4*d.* per,	0	11	0
,,	,, 20 dozen Savoy cabbage, at 3*d.* per,	0	5	0
March 6,	,, 2 stone seed potatoes, at 6*d.* per,	0	1	0
May 27,	,, ½ lb. jelly turnip seed,	0	0	4
June 3,	,, ¼ lb. Swede do.	0	0	3
,,	,, 1 load manure,	0	4	0
July 14,	,, Ashes,	0	2	6
,,	,, 250 Borecole plants,	0	0	7½
October 24,	,, 368 Nonpareil plants,	0	0	10½
,,	,, 1 load manure,	0	4	0
December 31,	,, Rent of 10 statute perches, at £5 per Irish acre,	0	3	10
	Total,	1	13	5
	To balance in favour of allotment at close of year,	2	0	6½
		3	13	11½

	CONTRA.	*Cr.*		
1854.		£	s.	d.
March 11,	By 33 stone Swedes, at 4*d.* per,	0	11	0
April 1,	,, 20 dozen Savoy cabbage, at 3*d.* per,	0	5	0
May 27,	,, 24 dozen Nonpareil do., at 4*d.* per,	0	8	0
August 22,	,, 24 stone potatoes, at 6*d.* per,	0	12	0
October 7,	,, 20 bunches turnips, at 4*d.* per,	0	6	8
October 14,	,, 14 do. do., at 3*d.* per,	0	3	6
	Stock and value in allotment this date,	2	6	2
December 31,	By 32 stone Swedes, at 4*d.* per,	0	10	8
,,	,, 23¼ dozen Borecole, at 6*d.* per,	0	11	7½
,,	,, 22 dozen Nonpareil, at 3*d.* per,	0	5	6
		1	7	9½
	Total,	3	13	11½

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INDUSTRIAL DEPARTMENT of the GLASNEVIN INDUSTRIAL and NATIONAL SCHOOL in Account with the COMMISSIONERS of NATIONAL EDUCATION.

Dr. GARDENS.

1854.		£	s.	d.
December 31,	To amount of stock and value in gardens on 1st January,	122	2	0
,,	,, Wages paid for labour, cart-hire, &c.,	56	17	4
,,	,, Fees paid pupils of the Industrial Class,	14	17	6
,,	,, Manure, seeds, and miscellaneous expenses,	25	1	7
,,	,, 6 pigs purchased at the Albert Institution,	9	0	0
,,	,, Rent and taxes of gardens, 1A. 2R. 18P., statute = 1A., Irish, at £5 per Irish acre,	6	11	10½
,,	,, Balance in favour of Industrial Department,	8	15	4½
		£243	5	8

CONTRA. *Cr.*

1854.		£	s.	d.
January 31,	By amount of receipts for the month ending this date,	3	12	9
February 28,	Do. do. do.,	5	3	5
March 31,	Do. do. do.,	6	10	5
April 30,	Do. do. do.,	9	15	10
May 31,	Do. do. do.,	5	13	3
June 30,	Do. do. do.,	4	10	11
July 31,	Do. do. do.,	2	11	6
August 31,	Do. do. do.,	7	16	6
September 30,	Do. do. do.,	8	3	2
October 31,	Do. do. do.,	6	10	8
November 30,	Do. do. do.,	6	10	7
December 31,	Do. do. £3 17 6 Do., for 6 pigs sold in market, £23 0 8	26	18	2
,,	Vegetables for my own use, 52 weeks at 2s. per week,	5	4	0
,,	Incoming debts to this date,	5	10	6
	Total amount of receipts,	104	11	8
	By value of stock in gardens on January 1, 1855,	130	10	0
	,, Box-edging and remaking old walks of entire garden, being an improvement with no return,	8	4	0
		£243	5	8

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Bailieborough Model Farm.

3. BAILIEBOROUGH DISTRICT MODEL AGRICULTURAL SCHOOL, County Cavan.

February, 1855.

Agricultural Instruction.—There are four distinct classes of pupils receiving agricultural instruction.

1*st*, *Agricultural Boarders.*—The greatest number allowed in this class is four; the full complement has kept up during the year. They have four hours daily for learning the different branches of a sound English education; also one and a-half for their agricultural instruction, in addition to the ordinary time allowed for acquiring a practical knowledge of farming pursuits. Their general conduct has afforded entire satisfaction during the year; and they were very attentive to their duties and studies, in which some of them made very considerable progress.

2*nd*, *Pupil-Teachers.*—The young men of this class receive one and a-half hour's instruction daily on agricultural subjects, besides assisting in whatever operations may be going forward on the farm for two hours each evening during summer, and from four o'clock till dark in winter. I can also speak highly of the members of this class. Though the time allowed for practical instruction is short, many of the young men trained here as "Pupil-Teachers" have, by close application and study, acquired a considerable amount of agricultural knowledge. Some of them are now conducting agricultural schools at workhouses, &c.

3*rd*, *Industrial Class.*—At present this class numbers seven members, selected from the ordinary day pupils of the model school. They receive half-an-hour's agricultural instruction daily, and work for two hours daily on the farm. They have, for their own special use, a collection of useful volumes on the different subjects, calculated to be most instructive to them, which they read regularly, and which are of the greatest service to them. Their conduct was excellent during the year.

4*th*, *Agricultural Class.*—This consists of the advanced boys in the school, who do not work on the farm, but merely receive half-an-hour's agricultural instruction daily in the school. The attendance in this class during the year ranged from thirty-three to thirty-seven. There has been but little fluctuation in the attendance of any of the above classes during the different seasons of the year.

At the public examinations held by the Head and District Inspectors, six premiums were awarded to the agricultural classes. I give a copy of the programme of examination submitted by me to the Inspectors at the examinations:—

"The following are a few of the subjects on which the boys of the agricultural classes are capable of being examined:—

"*Farms and Offices.*—Choice of farms; division of farms and formation of fields; situation of house and offices; the different rotations—soils to which they are adapted.

Drainage.—Evil effects of an excess of moisture in the soil, with reference to the growth of crops on it, the lime and manures applied to it, and the labour performed on it; various systems of, and materials used in draining.

"*Trenching and Subsoiling.*—The value of these operations in increasing the productive powers of soils; when they should be executed; and the various means employed in their performance.

"*Cropping.*—The different varieties of wheat, oats, barley, rye, and the several green and green-fallow crops; seasons for, and various methods of sowing and planting; quantity of seed and manures after culture and harvesting, &c.

"*Soils.*—Whence derived; several kinds in Ireland; characters and physical properties; organic and inorganic constituents.

"*Manures.*—Composition of the solid and liquid excrements of the horse, cow, sheep, pig, and man; general characters of the farm-yard and liquid manure; how collected, preserved, and applied; composition and application of portable manures, such as guano, bones, &c.; vegetable and mineral manures.

"*Chemistry.*—Atmospheric air—importance to animal and vegetable life; properties of its gases. Water—its uses and properties; composition of the organic and inorganic constituents of plants."

Model Farm.—The farm is, as formerly, divided into two portions; on one the four-course rotation is carried out, on the other the five. The green-crop field in the four-course shift was cultivated by manual labour; in the five-course shift by manual and horse labour combined. The cultivation, in all cases, was such as the various crops usually receive, or as the best practical experience has recommended. The crops, in general, this season, were superior to those of the previous years. I had Swedes sown in April with different kinds of manures, and at various distances apart; but being attacked by "fingers and toes," those experiments were rendered useless. Swedes sown later in the season escaped nearly free; but Aberdeens sown from May till the end of June were, in every case, injured to a considerable extent. I have remarked the disease to be most fatal during very dry and warm weather; yet, the moistest portions of the field were equally, if not more, affected than the dry parts. I have seen some diseased Swedes recover after two or three days' rain, throwing out an excrescence where injured, and becoming considerable sized roots afterwards; many of them rotted coming up to November.

Live Stock.—The stock on the farm consists of three cows, three heifers, one bullock, two calves, one jennet, and two pigs. It was much too large for the present size of the farm; but being nearly all reared on the farm, of a good description, and well adapted to the soil, I did not like to part with them as the Commissioners were about effecting an enlargement of the farm. I was, therefore, compelled to purchase a large quantity of feeding stuffs at a high rate. The additional land proposed to be taken adjoins that already constituting the model farm, and is the southern portion of the hill; it is completely encompassed by the old and new roads leading to Kells. It was nearly all in oats for the last two years, and will require a considerable outlay in permanent improvements, viz., levelling fences, draining, cleaning, &c. The farm will then require two stout horses, as it will contain nearly fifty English acres; it will henceforth pay better, and be conducted with more satisfaction to the agriculturist, who will have proper means of working, and not be dependent on others for horses, &c., as formerly.

Manures.—The manure yard is nearly level, having a spacious cemented brick tank, and metal liquid manure pump at one end. The cow-houses, stable, and piggeries, are connected with the tank by means of covered and cemented brick urinal sewers. The manure pit is placed above the tank, having a slight fall to it, that the oozings from the heap, if so required, may be allowed to fall into it. The floor under the heap is perfectly impervious; the undermost layer is blue clay; on this, as a basement, is placed a layer of bog-mould and a little earth to the depth of eight inches. During the formation of the heap the manure is mixed with alternate layers of bog-mould and peat ashes, together with some peat charcoal. Surrounding the entire heap, and at about three feet from it, is placed a small embankment of earth and mould, to prevent the waste of any of the liquid. In the bottom of this small space round the heap is placed mould to absorb the liquid—all is occasionally mixed with the heap during its formation. The farm-yard manure is always applied to green crops—none ever used, for so far, as top-dressings to grass or other crops. Guano is used, in addition to the ordinary manure, for turnips and other root crops, at from one and a-half to two cwt. per acre. I also use some as a top-dressing for oats growing on the space formerly occupied by old fences, and with great and marked advantages; it is sown in showery weather when the crop is about six or eight inches high.

Agricultural Improvement.—The agriculture of this district is evidently progressing in every respect: there is a marked improvement in the green-crop tillage, which, of course, must bring its accompanying advantages; and also in the improved kinds of grass-seeds sown, and manner of laying down for meadow and pasture. Unless in some few cases there are not many attempts at carrying out regular systematic rotation; still the number of grain and exhausting crops, taken in succession, is rapidly decreasing, and the land is being laid down in better "*heart*" than formerly. There can be no doubt about the model farm being the cause of much of this improvement. It will exert a wider and more effective influence in furthering the agriculture of this district in future, as the improved system will be much more extensively carried out here, and a great number of improved implements will be in use, which formerly could not be employed on so small a farm.

JOHN STEWART, Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Bailieborough Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	247	8	6
" Paid for Labour,	57	18	5
" Free Labour of Pupils,	4	0	0
" Paid for Farm Seeds,	1	10	5
" " Manures,	2	15	0
" " Cattle,	—		
" " Feeding Stuffs,	28	14	5
" " Implements and Repairs, &c.,	8	11	6
" " One year's Rent of Farm and Bog,	29	5	0
" " " Poor Rate (one-half),	1	3	6
" " " County Cess,	0	15	3
	£382	2	0

Cr.

	£	s.	d.
By amount received for Grain,	28	9	3
" " Roots, &c.,	2	12	10
" " Cattle Sold,	15	7	10
" " Dairy Produce,	15	15	5
" " Services of Bull,	1	3	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements, labour done for future crops, &c.,	290	16	8
By amount loss,	27	17	0
	£382	2	0

APPENDIX I.

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Bailieborough Model Farm.

TABLE showing the CROPPING of the Bailieborough District Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 0 25	March,	September to Nov.,	9 cwts.,	4 tons,	8 5 8	1 8 1	—	
Turnips,	2 1 15	April, May, June, and July,	Nov., Dec., Jan.,	10 lbs.,	28 tons,	12 8 0	6 12 0	—	
Mangels,	0 0 10	April,	November,	8 lbs.,	10 tons,	12 8 0	—	2 8 0	
Carrots,	0 1 0	April,	November,	6¼ lbs.,	9 tons,	12 13 4	5 16 8	—	
Miscellaneous,	0 1 0	Different,	Various,	—	—	10 5 2	—	0 10 6	
GRAIN.									
Oats,	4 2 30	March,	September,	8 stone, average.	10 brls., average,	5 4 0	2 16 0	—	
GRASS.									
Vetches,	0 2 0	April and May,	August,	3 bushels,	11 tons,	3 16 6	—	0 8 4	
Grazing,	2 2 10	—	—	—	—	—	—	Loss.	
Soiling and Hay,	2 1 32	—	June, July, August,	2¼ bushels,	1½ tons hay,	2 8 0	0 12 0	—	
Total,	13 1 2								
"STOLEN CROPS."									
Rape, Cabbages,	0 3 0	October,	June,	—	6 tons,	4 0 0	—	Loss.	
Total,	0 3 0								

(Signed), JOHN STEWART, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

31st December, 1854.

THOMAS M'ILROY, Manager.

APPENDIX I.

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Dunmanway Model Farm.

4. DUNMANWAY DISTRICT MODEL AGRICULTURAL SCHOOL, Co. Cork.

January, 1855.

Agricultural Instruction.—Agricultural Boarders.—This class is at present filled, and as compared with last year, shows an increase of two paying pupils. The free pupil who was here at the date of last Report, has been admitted to the Albert Institution at Glasnevin, and the place is now filled by another. The boarders receive agricultural instruction with the agricultural class; and, along with the pupil-teachers, and paid monitors, have the benefit of a good literary education under the literary teachers. They are required to participate in all the operations of the farm, and to take charge of the yard, and attend to the cattle, &c., in turn. By this arrangement every opportunity is given them to become conversant with the cultivation and management of the different farm crops, and the feeding and general treatment of live stock. I have every reason to be satisfied with their conduct, and the attention which they have paid to their out-door employments; but I regret to have to add that their progress in the study of agricultural subjects, owing to the very limited time set apart for their instruction in this department, is not marked by as much improvement as could be wished. I believe that in all other schools, as was formerly the case here, the mornings are set apart for the study of agricultural books, and for lectures, followed by examinations from the agriculturist; and until some such arrangement is again made here, it cannot be expected that due proficiency will be attained in the knowledge of agriculture. The pupil-teachers receive, on an average, but *half an hour's agricultural instruction in the week*, for the twelvemonth which they stay here, though they appear, without exception, most anxious to become acquainted with theoretic agriculture, and the principle of those sciences more immediately connected with it, but this in the time allowed is perfectly impossible. The pupil-teachers continue to work half-an-hour each evening, and the manner in which they have conducted themselves, as well as the attention given to their business, has given general satisfaction. I would beg to suggest that the paid monitors be also required to take part in the farm work. While the other boys are usefully and industriously employed, they are to be found lounging about the farm or school-yards, contracting those indolent habits which are so difficult to be got rid of when they become connected with the schools, either as pupil-teachers or agricultural boarders. Perhaps the Commissioners might grant a small pecuniary payment, the same as that given to the industrial class, as a recompense for their labour. But, in any case, the industrial training of these boys, destined doubtless to be themselves teachers of youth, ought not to be neglected.

Agricultural Class.—This class, averaging about fifty, is formed of the fourth, third, and the higher division of sequel classes, together with the agricultural boarders, pupil-teachers, and monitors. Instruction is given on Tuesdays and Thursdays, from half-past two to three o'clock, and on Saturdays from half-past eleven to twelve o'clock. The method adopted is to let them read, or to lecture them, on the first two days of the week, and examine on the third. Before concluding a subject, a final and more general examination is held, and small premiums given to the best answerers; by this means the subjects are kept fresh in the memory, and a wholesome and praiseworthy emulation, calculated to effect quick and lasting improvement is excited. When the sequel class boys were first introduced into this class, it was found very difficult to fix their attention, or make them at all interested in what was going on; but now there is an entire change: some of the boys who refused until, in

Dunmanway Model Farm.

accordance with the wishes of their friends, they were compelled to attend, are now some of the most anxious to improve. Notwithstanding the difficulty of suiting simultaneous instructions to such a large class, and the utter impossibility of paying that attention to individual capacity, which is so necessary to successful teaching, it is gratifying to think that good proficiency has been made. Many of the more advanced boys, most of them farmer's sons, quitted school during the year, every one of whom, I feel convinced, will benefit more or less in after life by the knowledge they acquired while members of the agricultural class.

Industrial Class.—This class continues to work well, the number (twelve) allowed being always on the roll. The attendance has been regular; and it is a source of much pleasure to mark the attention which the majority of those boys pay to every thing going forward on the farm, and the desire they evince to become conversant with the cultivation of the crops. Those who are longest in the class have become pretty expert in the performance of the various manual operations, as digging, hoeing, weeding, and may be intrusted to do any work suited to their strength; and if no further benefit were derived from their industrial training, any expense and trouble incurred in instructing them would be amply repaid. But when we come to consider the many other advantages derivable from it, it will be seen that there are few cheaper or more efficient agencies for the promoting the industrial progress of this country. As an evidence of the favourable light in which this practical instruction in agriculture is viewed by farmers in this neighbourhood, I may mention, that the parents of many of those who attended in this class during the year, are in such comfortable circumstances, that mere pecuniary considerations could not have influenced them in causing their children's attendance. Also, that even in the busiest seasons, when the smallest help is valuable, they are not kept at home, except for the performance of some employment, which, from having seen and taken part in here, they are expected to do better than others. I intend introducing the "allotment system" amongst them this year, and hope to be able to report favourably on its working when it shall have been fairly tried.

Model Farm.—The rotations established are the three and four course shifts; but as in order to suit our peculiar circumstances, there has been a departure from the ordinary course of cropping—it may not be out of place to describe briefly the cropping of each. In the three crop shifts, the state of the soil did not warrant the putting of the oat crop in the whole of the field intended for it, nor the sowing of grass-seeds with the portion which was got in. One-half of it was sown with oats, and the other with carrots and mangels, for the purpose of enriching and cleaning it. The rotation stood as follows:—

No. 1.—Green crops, to be succeeded	by	Oats, some with grass-seeds.
No. 2.—Half oats, half green crops,	,,	Green crops.
No. 3.—Grass,	,,	Grass.

Thus, though there is an infringement of the usual order of cropping for one year, in order to assimilate the condition of the land under this course, it will next year be in the simple form in which it is intended to be worked. In No. 1, which was partly lea and partly turnip ground, two experiments were instituted—one with the view of ascertaining the value of Peruvian guano and town manure, as compared with the manure made upon the farm; and the other to determine the kind of Swede turnip best suited to the soil, and producing the heaviest crop. In the first case the experiment was prevented being carried out by the disease "fingers and toes" attacking the crop; but

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though this experiment failed, in as far as it related to the object for which it was instituted, it turned out an interesting one in another respect, viz.:—in determining the effects produced by the disease on the *same kind of turnip* (Skirving's Swede) grown upon *different manures.* This crop was sown on the 11th of May, the soil (on which turnips grew the previous year), being prepared in the usual way. The plots continued to grow without any observable difference till July, when that portion to which the guano was applied was observed to fall behind the other two; soon after the leaves began to droop, and eventually to decay, when it was observed that the bulbs also were affected. It next attacked the portion to which the town manure had been applied, and finally that manured from the farm-yard. The plots first attacked soon presented such a miserable appearance, that it was deemed advisable to remove the crop, and supply its place with another. The third was allowed to remain till November, when it was found that more than one half of the bulbs were diseased. It is worthy of remark that though three other sowings of Swedes were made, this was the only one diseased. The second experiment was made on the lea portion of the field; good farm-yard manure, about thirty tons per acre, and a little guano, to force the crop, was applied. The four varieties mentioned below were sown on the 6th June, drills the same distance (twenty-four inches) apart, and the bulbs thinned to the distance of twelve inches. The following table shows the results:—

Variety of Turnip.	Produce per Statute Acre.			
	Tons	cwts.	qrs.	lbs.
Skirving's Swede, ...	20	10	0	12
Laing's ,, ...	17	5	3	0
Fettercairns, ...	19	0	0	0
East Lothian, ...	22	8	0	0

Although the last of these gives the heaviest produce, I consider the first decidedly the best of the four, as being the soundest and best formed. Laing's, from any experience I have had in its cultivation, I do not consider at all good—of the above four it was the only one diseased, and even when not diseased at the time of storing, it seldom keeps well.

No. 2. The green crops raised were a good average; but the oats were an inferior crop. That part of the field occupied by oats was thoroughly cleaned, manured, and sown with rye and rape in September. These will be off in time to sow Swedes. The other portion will be under cabbages and early potatoes; thus the field will by the next year have been thoroughly cleaned and manured twice, and the object attained, for which a change in the rotation was deemed necessary.

No. 3. Being, at the time it was laid down, intended to remain only one year in grass, was not well suited to produce another crop. It was therefore top-dressed in the month of October, and Italian rye-grass sown, at the rate of one bushel per acre, which promises to give a good crop in the ensuing season.

Four-course Rotation.—In the four-course shift a slight alteration was made, which, unlike that in the three-course, is designed to be permanent. It now stands thus:—

1st Year.—Potatoes, Swedes, and mangels.
2nd Year.—Half wheat, half early turnips, and cabbages.
3rd Year.—Italian rye-grass, sown in spring and autumn.
4th Year.—Oats, rape, rye, and vetches, as stolen crops.

This rotation differs considerably from that previously followed, as will be seen from looking at the course of cropping in 1853, two green crops were grown after each other. This it was not thought advisable to continue. Winter beans cannot be profitably sown on such soils as this; and a very apparent defect was observed in the rye-grass grown after them, as compared with that grown after any of the other crops. The beans were therefore left out, and their place supplied with wheat, as being more profitable, and better adapted for laying down with grass. Potatoes, which were before grown in the same year as wheat, were made to precede it, and their place supplied by early turnips. A glance at the above arrangement will show that, by the course of cropping pursued, a very large quantity of feeding can be raised, and as a consequence the soil increased in fertility. The stolen crops, except the rye which entirely failed, gave fair returns. The *winter vetch* was sown in spring; one small plot of the spring variety being sown beside it as a trial. The result was as I expected—the former, treated in all respects the same as the other, produced three and a-half tons per acre more. This is accounted for by the quantity of rain which falls here, and is mentioned as a fact which may be useful to others similarly situated.

The grain produced a fair average; and the roots, except mangels, for which the soil is not suited, as may be seen by a reference to the statistics, brought good returns. Early improved turnips were sown on 11th of April, and proved most valuable feeding in July and August. The Italian rye-grass was sown partly in spring with wheat, and in autumn after potatoes, cabbages, and winter beans. That sown in spring was earliest; the other, except the portion after beans, produced as well.

The only other points worth noticing are, that in two experiments to determine whether beet and kohl rabi gave a larger return, when *transplanted*, or *allowed to remain where sown*: the crop raised in the latter way was much superior in both cases. The following are the results:—

Crops.	Transplanted.		Not Transplanted.	
	Tons	cwts.	Tons	cwts.
Silesian sugar beet, ...	5	15	13	0
Kohl rabi (green)	3	12	8	5

In each case the seeds for transplanting were sown fifteen days before the others, and put out on similarly prepared land when the others were being thinned. The kohl rabi was in both cases a bad crop, and would not nearly defray the expense of cultivation, while the beet, both in bulbs and leaves, was a heavier crop than the mangels.

If the balance sheet of the year's transactions be taken as a criterion of the success which has attended our labours, much credit will not appear due to us, the more especially as that for the year preceding shows a profit. But though the loss on the past year's transactions appears considerable, it is accounted for by occurrences which it was impossible to prevent. By the failure of the rye crop before alluded to, a two-fold loss was sustained in the reduction it caused in the dairy produce, and the outlay it occasioned in the purchase of feeding stuffs. And when the loss of another equally valuable crop, (the turnips, by finger and toe disease), the large sum expended for labour, and the other unfavourable circumstances under which the farm labours, are all considered, a favourable pecuniary result could hardly have been expected. The want of a horse was also a great drawback, very high wages, 3s. 6d. per diem, having to be paid for horse labour; but this will not occur in future, as a good horse has been purchased, and arrangements made with Mr. Delany of the Glandore Farm, to have both horses work each farm alternately, by which it is expected considerable expense will be saved, besides having the work done properly, and in proper time.

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Live Stock and Dairy Management.—Four milch cows, two heifers, a calf, three pigs, and some poultry, were kept during the year. The cattle were constantly house-fed until September, but since then have been allowed to graze for about three hours each day. The feeding and treatment are the same as described in former reports.

In the dairy management there is nothing peculiar to be described. A large proportion of the milk is sold new; what is not so disposed of is set and skimmed; the cream is churned usually once a week, and the butter sold fresh in the market—the highest price is invariably received, and the buttermilk and skimmed milk are either sold or given to the pigs. The receipts for dairy produce amount to £30, but a much larger sum would have been realised were it not that one of our best cows had to be sold just at the time of calving. Two calves were reared, which also tended to lessen the receipts under this head. No casualties occurred, nor did disease in any form present itself among the stock.

Manures.—The nature of this farm, and the course of cropping which has been adopted, render it necessary that the greatest attention be paid to the manure heap. It is made up every day; the dung from the cow-sheds, stable, and piggeries, being mixed with peat-mould, weeds, &c., and saturated with the liquid collected in the tank. The heap is turned once or twice before being used, and is applied to the crops in the usual way. It is intended in future to apply the liquid *directly* to the crops, instead of being mixed with the solid manure.

Peruvian Guano and *Soot* were the only extraneous manures used; and except in the case of the turnip crop, mentioned in another place, when trial was made of these fertilizers, very superior crops were obtained. On the spring-sown grass, in the four-course rotation, an experiment was tried for the purpose of testing the efficacy of soot, and determining its value as a top-dressing. The following table gives the results:—

No. of Plot.	Kind and quantity of Manure per statute acre.	Cost of Manure per statute acre.			Produce per statute acre.	Cost of each ton of grass produced by top-dressing.			
		£	s.	d.		£	s.	d.	
1	Soot, 25 bushels, at 5*d*. per	0	10	5	8 tons.	0	3	0	nearly.
2	Peruvian guano, 2 cwt. at 14*s*. per . . .	1	8	0	8 ,,	0	8	0	
3	Compost, 60 lds. at 6*d*. per	1	10	0	6½ ,,	0	15	0	
4	No manure . . .		—		4½ ,,			—	

A consideration of the above shows that, as a top-dressing for grass, soot is most efficacious, while it cost only one-half as much as guano, at ordinary prices, and is one-fifth that of compost, estimated at the lowest price. The superiority of the soot was observable from the second week after dressing. It was applied immediately before a heavy fall of rain, as was also the guano, but the compost not till after, and the dry weather which set in immediately may have prevented its acting as beneficially as in other circumstances it would. At the second cutting, the grass on the soot and guano dressed portions, produced equal quantities, four and-a-half tons each, while the plot to which compost was applied gave but two tons, and the remaining one, which got no manure, only 19 cwt. To another portion of this field soot was also applied, but rain did not fall as was expected, and the consequence was that instead of producing favourable results as above, the grass was almost destroyed, and did not begin to recover until about six weeks afterwards, when the fall of a good quantity of rain produced the desired

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effect. I have been thus particular in mentioning my experience in the use of this manure, because it is one about which there is a great diversity of opinion. I consider it a most valuable auxiliary to the farmer. It has been used here repeatedly, and *always* the results have been satisfactory, and so well is its usefulness understood in some of the neighbouring districts, that 8*d*. and 10*d*. per bushel is paid for it without hesitation.

Permanent Improvements.—None were effected except the improvement of the soil by ample manuring and superior cultivation be deemed as such. A considerable outlay was incurred in keeping the road-side fence at both sides of the farm in repair; and I may be permitted here to bring under your notice their total inefficiency. The unsightly appearance which they present, and the insufficient security which they afford to the crops, render it necessary that something be immediately done to improve them; while from their proximity to the town, and the unfavourable contrast which they present with every thing about the schools and farm, it is to be regretted that they have not long since been removed. The sum which would be required to build a new fence will be expended in a very few years in trying to keep the existing one in repair, while the advantages to be derived from the construction of permanent fences would more than compensate for the cost of their erection.

Progress of Agricultural Improvement.—From the comparatively short time which I have been here, I cannot speak from personal knowledge of the influence which the agricultural instruction given on, and the example afforded by the model farm, have exerted on the agriculture of this locality; but I have been told by competent judges, that they were the principal means of effecting that improvement which is every where becoming so evident. Before the establishment of a model farm here, green-crop culture was almost unknown; wheat, oats, and the potato being the only crops ever raised. Attempts, usually unsuccessful from the absence of all knowledge of the subject, were indeed made at turnip cultivation; but carrots, parsnips, and mangels, were unknown as field crops; and rye, rape, and vetches, had not yet made their appearance. Happily, from whatever cause, this state of things no longer exists. Well-cultivated fields of turnips, many of them as good as we ourselves can raise, and, when the soil is suitable, mangels and carrots are now pretty generally to be met with. More attention is being bestowed on the cultivation of corn and the potato, which are in many instances followed by stolen crops. Portable manures, guano and bones especially, are coming into more general use; and a much improved description of stock and farming implements is every where to be seen. More attention is also paid to the collection and preservation of manures, to the proper preparation of the soil, early sowing of seeds, and other equally important matters. Still, though much has been done, much remains to be done to remedy the defect of undrained fields, to remove furze-brakes, waste headlands, and pernicious weeds, before we can witness all the characteristics of improved husbandry. But what has been done during the last few years makes us look hopefully to the future; and with the expectation that the instruction and example which, it is admitted by all, have so largely contributed to promote those changes which have already taken place, will prove no less instrumental in effecting the improvements which yet require to be effected in the industrial practices of the people of this locality.

Conclusion.—*Suggestions.*—Before bringing my Report to an end, I beg leave to submit for your consideration the following suggestions:—

1st. That a time and place be set apart for the instruction of the agri-

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cultural boarders, and in which they may study their agricultural books; and that the pupil-teachers and monitors be allowed to join them for at least one hour each morning. 2nd. That a low wall or fence be built on both sides of the public road passing through the farm—the present old and dilapidated one to be removed; and 3rd. That the farm be enlarged, and additional accommodation provided for "boarders." The fact that the adoption of any of the above suggestions would impose additional labour on myself, is sufficient to prove that they are submitted solely from a belief that they are required for the efficient working of the "agricultural department" of this establishment. Several boarders are offering, who cannot be taken for want of accommodation; while to any one acquainted with the farm, it is evident that it is too small, either for being profitably worked, or serving as a "model" for a locality where the farms are generally large, and where their owners cannot feel so much interested in what is done on so small a scale.

SAMUEL BELL, Agriculturist.

Having been requested by Mr. Bell to add a line in seconding the recommendations at the close of his valuable Report, if *I approved of them*, I have pleasure in doing so, in proof of my full concurrence in all he suggests.

The fences are most unsightly and insufficient, and as a consequence, trespass is frequent, and can scarcely be prevented by any amount of vigilance; and so much loss has been sustained in this way, that even on the ground of economy, I would strongly recommend a small grant, say £10, for putting the fences in a safe and respectable condition of repair.

As to the enlargement of the farm, there can scarcely be but one opinion on the subject—the premises are too small, either as a model, or for profit; for a model, they should be of commensurate extent with the average size of farms in the neighbourhood, viz.: between forty and fifty acres; and the present limited extent must always interfere with the profits, there being always an excess of manual and horse labour, besides valuable supervision, for which there is no vent. Although there is a loss on the year's transactions, still it arises from causes beyond human control, otherwise, independently of the great advantages by precept and example to the neighbouring community, the results are productive of reasonable satisfaction, when it is considered that a plot of ground, scarcely exceeding *seven Irish acres*, has been able not only to support seven head of cattle, but also to supply some £80 worth of crops, independent of dairy produce.

J. HAMILTON.

[SUMMARY, &c.

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SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	163	0	0
„ Paid for Labour,	39	8	2
„ Free Labour of Pupils,*	—		
„ Paid for Farm Seeds,	8	12	8
„ „ Manures,	7	13	6
„ „ Cattle,	19	9	3
„ „ Feeding Stuffs,	8	3	4
„ „ Implements and Repairs,	4	0	0½
„ „ One year's Rent of Farm,	31	12	8
„ „ „ County Cess,			
	£281	19	7½

Cr.	£	s.	d.
By amount received for Grain,	7	17	6
„ „ Roots, &c.,	17	8	3½
„ „ Cattle Sold,	9	3	6
„ „ Dairy Produce,	30	0	0
„ „ Eggs and Poultry,	0	13	10
„ Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	195	17	0
„ Manure, Mould, &c., used in pleasure-ground,	2	0	0
„ Profit and Loss for balance, being Loss,	18	19	6
	£281	19	7½

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* The labour of Pupils went to the keeping pleasure-ground, walks, &c., in proper order.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dunmanway Model Farm.

TABLE showing the CROPPING of the Dunmanway District Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Carrots,	0 1 10	April,	November,	7 lbs.,	16 tons,	9 9 0	6 11 0	—	
Parsnips,	0 0 15	April,	November,	7 lbs.,	9 tons,	9 9 0	2 5 0	—	
Mangel,	0 1 10	April,	November,	5 lbs.,	12 tons,	9 9 0	2 11 0	—	
Beet,	0 0 15	April,	November,	5 lbs.,	13 tons,	9 9 0	3 11 0	—	
Kohl Rabi,	0 0 20	May,	November,	6 lbs.,	8 tons,	9 3 0	—	3 11 0	A bad crop—diseased.
Cabbages,	0 0 36	March,	Fed off,	—	12 tons,	9 0 0	1 10 0	—	
Potatoes,	0 2 0	March,	Last week in Sept.,	8½ cwt.,	8½ tons,	9 10 0	6 10 0	—	Protestants—a very fine crop.
Turnips, Swedes,	2 1 15	May and June, August,	December,	6 lbs.,	20 tons,	9 3 0	6 17 6	—	Three roods of Swedes were destroyed by finger and toe.
Turnips, Aberdeen,	0 1 27				16 tons,	8 17 6	1 2 6	—	
Turnips, Globe,	0 1 27				16 tons,	8 15 0	—	0 15 0	Globe not come to maturity.
Early improved,	0 2 0	11 April,	Summer,		18 tons,		2 10 0	—	
GRAIN.									
Wheat,	0 3 0	November,	August,	12 stones,	5¼ barrels,	4 2 6	4 6 6	—	
Oats,	2 0 0	3rd week in March,		11 stones,	8 barrels,	4 0 0	6 5 4	—	
GRASS.									
Italian and Perennial Rye Grass,	3 2 30	April and September,	Cut through the summer,	—	2½ tons hay,	—	—	—	
Total,	12 1 5								
"STOLEN CROPS."									
Rape,	0 1 26	In Autumn of preceding year,	Fed in April & May,	—	8 tons,	—	—	—	
Rye,	0 2 10		Failed,	—	—	—	—	—	The Rye did not grow.
Vetches,	0 3 8	Nov. and March,	Soiled in June,	3 bushels mixed with 1 of oats,	11 tons,	5 0 0	2 0 0	—	
Total,	1 3 4								

(Signed,) SAMUEL BELL, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

February 5, 1855.

J. HAMILTON, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Athy Model Farm.

5. ATHY DISTRICT MODEL AGRICULTURAL SCHOOL, County Kildare.

January, 1855.

Agricultural Instruction—Agricultural Boarders.—I am happy to state that the boarding pupils have conducted themselves with great propriety, and have been, on the whole, most attentive to their studies. I have had no class under my charge that have acquitted themselves more to my satisfaction than the present one; and the pupil-teachers, considering their opportunities, have made great progress in theoretic agriculture. Both classes of boarders have merited my strongest approbation both by their assiduous attention to study and their satisfactory performance of whatever work was allotted to them, and no unpleasantness was evinced by any member of either classes, but all worked with the greatest good will. The only unfavourable occurrence in the year's proceedings was the dismissal of one young man for disorderly conduct. Three young men were advanced to Glasnevin during the year, and their places have since been filled up.

Agricultural Class.—This class has been well attended during the last three months. Upwards of forty are on the roll at present; but the attendance has fluctuated very much throughout the year; at one time six or eight, at another time the numbers would swell to an inconvenient size for one person to manage. This fluctuation is partly caused by its being optional with the pupils to attend, and partly from the difficulty of arranging the hour for agricultural instruction so as not to interfere with the arrangements of the literary school.

Industrial Class.—This class has not been so successful as I expected. The attendance has been most irregular, and, consequently, little progress could result from it. This is much to be regretted, as it is a class from which much good may be expected. At present it numbers eight, though two months ago it was reduced to two.

Model Farm.—The general work of the farm has progressed as usual since last report. Some slight modifications were introduced, and additional experiments instituted, which I shall briefly detail. The plot where the potatoes and cabbages were grown was subsoiled, the manure applied as the work was executed, over which the soil was roughly drilled. In the hollows of the drills the cabbages were planted early in November, 1853, and the earth from the top of the drill served to mould the cabbages in spring when the ground was left perfectly flat. In the first week of March the potatoes were planted in the intervals between the lines of cabbages. A slight deviation from our former practice occurred in the mode of planting: as the hole was made the set was put into it, and covered by the earth taken up in making the next hole, into which a set was dropped in turn, which was again covered by the earth taken up to make the next, and so on; thus the making of one hole covered the one immediately before it in the same drill, whereas last season the entire set of holes of one drill were covered by making the entire set of holes of the next drill. The cabbages were subsequently earthed with turnip or draw hoes, and no further tillage was given till they were removed in the end of May and early in June, before they interfered injuriously with the potatoes. After the removal of the potatoes, in the month of August, rape was planted, and a crop exceeding twelve tons per acre removed in the end of October, making in all *three crops on one manuring in less than twelve months.*

Another deviation from our former practice was the ploughing-in of the manure for the turnip crop. The application of manure in this way to potato, cabbage, carrot, parsnips, and bean culture, has long been

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Athy Model Farm.

a favourite plan with me, but I never, until last season, attempted it in the growth of turnips. I am happy to report the full realization of my expectations—so much so, that I intend extending it to the mangel crop this season. To me it appears to be the cheapest and most effectual system of green-crop culture, and decidedly less objectionable than the method of applying the manure in ordinary practice.

In grain culture, the "Lois Weedon" system has undergone a trial and the result has been very encouraging. I need not describe the *modus operandi*, as it is now so well known, but merely give the result of the experiment. The soil is a light calcareous loam, and the tillage after the seed was sown was simply two hoeings of the drills followed by hand-weeding, and three deep diggings of the intervals. So favourably impressed have I been with the result that I have devoted one of the divisions of the original farm to a continuation of it. I may also state that the grain used was oats, as the season was too far advanced to sow wheat before I got instruction to give the system a trial. The following table shows the result:—

System.	Period of Sowing.	Quantity of Seed.	Time of		Produce.						
			Reaping.	Weighing.	Straw.				Grain.		
					tns.	cwt.	qrs.	lbs.	cwt.	qrs.	lbs.
Broadcast, .	Mar. 16,	10 st. per stat. acre.	Sept. 7,	Sept. 22,	2	5	0	8	22	2	1
Lois Weedon,	Mar. 30.	2 st. 11 lbs.	Sept. 15,	—	2	7	0	8	23	1	0

The difference shown by the above table is certainly very trifling. but it is in favour of the "Lois Weedon" plan, especially when the circumstances of the case are taken into account. The sowing was later by a fortnight than the broadcast grain; it was on the worst part of the field, and it suffered more from the birds than the broadcast grain. The small quantity of seed is a striking feature in this system, and the total absence of weeds is another—both of much importance to the Irish farmer.

Several experiments were instituted to test the respective merits of a few artificial manures as top-dressings for grain. The accompanying table exhibits the details and results:—

No.	Period of Sowing.	Time of Top-dressing.	Manure used.	Time of Reaping.	Produce of					
					Straw.			Grain.		
					cwt.	qrs.	lbs.	cwt.	qrs.	lbs.
1	Apr. 6 & 7,	May 26,	40 bushels soot,	Sept. 18,	32	2	0	18	2	0
2	—	—	1 cwt. nit. soda, 1 cwt. common salt, mixed,	Sept. 20,	26	0	0	16	0	0
3	—	—	1 cwt. nit. alone,	Sept. 20,	Not weighed.			15	2	8
4	—	—	Nothing, . .	Sept. 21,	Do.,			17	0	16

The field in which these experiments were conducted was in a very foul and exhausted state when it came into our possession. Upwards of 100 cart loads of couch-grass and other weeds were taken out of it previous to sowing, so that, according to Mr. Pusey, "it was in the proper state for testing the relative effects of the manures." From the trial given, nitrate of soda does not seem to realize the high opinion expressed by Mr. Pusey and Mr. Hope, but, on the contrary, had an injurious effect.

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II. Appendix to Dr. Kirkpatrick's Report.

Athy Model Farm.

The subjoined experiments on the different sorts of mangel manures and tillage were also carried out here this season:—

No.	Time of Sowing.	Kind and quantity of Manure.	Period of Lifting and Weighing	Produce.		
				tons	cwt.	qrs
1	May 3,	20 tons farm-yard manure and 4 cwt. bone compound, ...	Nov. 6,	20	4	0
2	,,	Do., 2 cwt. bone compound and 1 bush. salt, ...	,,	21	0	0
3	May 4,	Do., 1 cwt. bone compound and 20 bush. soot, ...	,,	21	1	2
4	,,	Do., 2 bush. salt and 20 bush. soot, .	,,	24	3	0
5	,,	Rotted weeds and 5 cwt. bone compound,	Nov. 8,	20	10	0
6	May 5,	Do., and 1½ cwt. bone compound and 20 bush. soot, ...	,, 9,	19	0	0
7	,,	Do., and 2 bush. salt and 20 bush. soot,	,, 10,	18	10	0
8	,,	Ashes alone, ...	,,	17	0	0
9	May 6,	40 tons farm-yard manure, ...	Nov. 13,	23	13	0
10	,,	8 cwt. bone compound, . . .	,,	23	3	0
11	,,	20 bushels soot and 2 salt, ...	,,	20	4	0
12	,,	No manure, ...	,,	14	16	3

The results exhibited by the above table are very varied. It would appear in the first set of experiments (down to No. 4) with *farm-yard* manure, that the application of salt and soot was most beneficial, and that the produce increased from an increased application. On looking at the second set (from No. 5 to 7) with rotted weeds, it would seem that the reverse was the case. This, however, is easily explained, as it was by the use of refuse salt that the decomposition of the weeds was chiefly effected, and, perhaps, the quantity of salt used in addition was in excess. No. 11 would support this view, as it is the same complement, used without the rotted weeds or any other manure, and the return is larger. It is difficult to account for the difference exhibited by Nos. 9 and 10, compared with No. 1. Both used separately give a larger return than when halved and combined. I have no doubt but that the bone compound is a valuable fertilizer, and may be applied with advantage to some soils, though it is not very marked in its results in this set of experiments.

The next set of experiments to which I would call your attention was undertaken with a view to ascertain which variety of mangel would yield the largest acreable produce. The subjoined table shows the result:—

	tons	cwt.
Yellow globe, ...	20	16
Red do., ...	20	8
Long red, ...	20	7

From the foregoing it would seem that the yellow globe variety has the advantage; and in all my former experiments, extending over five years, it has maintained the pre-eminence. I consider it the most superior root for all classes of soil.

Another experiment, somewhat similar to the one established last year, as to drilling on the flat and at different distances, was also carried out this year. In this set nothing but farm-yard manure was used, which was trenched in. The accompanying table shows the result:—

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Form of Drill.	Width.	Distance of Plants in Drill.	Produce.		
			tons.	cwts.	qrs.
Raised, .	27 inches,	12 inches,	23	13	0
Flat, . .	27 ,,	12 ,,	17	8	1
Do., .	24 ,,	11 ,,	22	1	2
Do., .	21 ,,	10 ,,	15	14	1
Do., .	18 ,,	9 ,,	19	14	1

As far as the flat drills are concerned, it is in favour of the two fe drills, which is exactly in accordance with last year's experiment. I is but proper to remark that there was less or more failure in the f drills, and, consequently, a good deal of transplanting had to be do which partly accounts for the smallness of the returns, especially No. 2 and No. 4 items.

One pound of white Silesian beet was sown, and the produce amount to 18 tons 11 cwt. 1 qr. per statute acre, which I consider a good cr

Our experiments on the turnip crop were much more varied an extensive than on the mangel; in fact too extensive and complicat for one person to manage properly, or attend to so closely as th required; and the consequence is, that I am only able to rec four items correctly, and these convey a very faint impression of th value of the series, had I been so fortunate as to be able to cond them all successfully:—

No.	Time of sowing.	Kind and quantity of Manure.	Time of lifting and weighing.	Produce.		
				tons	cwt.	qrs.
1	May 12,	Compost of ashes and road-scrapings ploughed in with 24 bushels soot, 2 bushels salt, and 1 cwt. guano, per Irish acre, ...	Dec. 12,	25	14	[illegible]
2	May 24,	Road-scrapings, bog-mould, and farm-yard manure ploughed in with 4½ cwts. bone compound, per Irish acre, . .	—	21	1	2
3	May 29,	Farm-yard manure ploughed in with 1 cwt. guano, 1 cwt. bone compound, 1 cwt. superphosphate lime, and 20 bushels soot, ...	—	18	16	3
4	May 31,	Farm-yard manure ploughed in with 40 bushels soot and 20 bushels salt, . .	—	17	14	[illegible]

The next experiment is a very interesting one at the present tim Many attempts have been made to bring this crop under the notice the Irish farmer, but apparently with little success. It is some yea ago since I began to grow kohl rabi, yet I cannot say that it has ever will become a favourite with me. A most impartial trial was gi it, as the details will show. Some seed of both kinds was sown in t garden in the month of March, at the time of our usual sowing of ca bage seeds, which was transplanted shortly after the seed sown in th field had braired. I am sorry the turnips grown beside the kohl rab were not weighed, but I take the average of the four lots given abo as the standard of comparison:—

	PRODUCE.		
	tons	cwt.	qrs.
Green kohl rabi, transplanted	15	6	3
Red do., do., ...	15	6	3
Green do., from seed sown at the same time as turnips and in same manner, ...	13	0	0
Red do., do., ...	11	0	0
Average of turnip crop, ...	20	16	3

Kohl rabi has its advocates, and it may have its advantages, but it is quite evident from the above that its produce is decidedly inferior to turnips, and I have *always* found it so. Our cattle do not relish it much. It would appear that sowing it in a seed bed and transplanting it is the best method of cultivating it; and it would also appear that there is very little difference between the red and green varieties. The difference between the sown red and green may be accounted for by the fact that in hoeing the crop a number of vacancies were made by an inexperienced hoer, and rape plants were put into the blanks. The red being on the outside, and consequently first hoed, suffered more.

Permanent Improvements.—On newly opened farms, or where subsequent additions are made to the original farm, permanent improvements usually form a very heavy item. In our case this is strikingly exemplified. The heaviest improvement that was undertaken on this farm was the reclamation of about two acres of waste and common on the southern boundary of the farm, and to which I referred in my last Report. This is now well nigh completed. It has cost about £85, a pretty high figure it must be confessed, but when it is remembered that it is free of rent, &c., that the farm was insecure on that side—that previously it was a nuisance, while now it is valuable land—that the whole of the material for levelling had to be carted from a distance, and pits had to be filled up to the depth of six feet, that the entire surface soil had to be put on it, and two-thirds of it carted to it —it cannot be considered too high. A considerable proportion of both tile and stone draining was executed during the year. Fences were levelled, and a new one built. Trenching and trench-ploughing also formed a portion of our preparatory tillage.

Live Stock.—The live stock are treated in somewhat the same way as described in my last Report, and the dairy business exactly similar. The number of stock is about the same as last year, as no additional accommodation was provided. Buildings are now in course of erection for young stock, fat cattle, pigs, and sheep, and, when completed, will add much to the comfort of the stock and the improvement and usefulness of the establishment.

Progress of Agricultural Improvement.—Improved farming in this neighbourhood is advancing rapidly; and farm implements of the most efficient kind are becoming common. There are some farmeries here that are well stocked with new and improved implements of all descriptions, and the district can now boast of a reaping machine, steam-engines for farm purposes, and of threshing machines, both fixed and movable. Farming in general is becoming properly understood. Many things, of course, have yet to be learned, but on the whole the progress is very striking. That this institution has been instrumental in helping forward this desirable state of affairs hardly admits of a doubt. A considerable quantity of Italian rye-grass has been sown in different parts of the country from our recommendation of it, and from its successful growth here. Ploughing-in of manure and trench-ploughing has also been practised by at least one of our constant visiters. I could not record one-half of the instances where I have been applied to for information on the details of practical farming. Numerous visiters of the farming class called for the purpose of obtaining information, and written applications from parties at a distance all tend to prove the usefulness of the institution. I might also mention that I have been called upon to visit farms to give advice respecting their management or suggest improvements.

The balance sheet bespeaks a fair share of success, especially when it is borne in mind that an addition was made to our farm during the

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Athy Model Farm.

past year, on which a great deal of miscellaneous and unaccounted for improvements were carried out, besides a considerable portion of the previous holding was exceedingly difficult to till, clean, and otherwise make ready for crop.

In conclusion I beg to thank those gentlemen who so kindly consented to act as valuators, and who favoured me with their opinion of the general management of the department under my charge, to which I beg to call your attention.

WILLIAM M'MEEKIN, Agriculturist.

We, the undersigned, hereby certify that we have on this day (23rd December, 1854) valued the farm produce, stock, implements, &c. of the Athy District Model Farm; that we have examined each item separately, and that the value of each is fairly represented according to the best of our knowledge and belief.

While acting thus in the capacity of valuators to such an establishment, we would beg leave most respectfully to offer a few remarks on its working during our knowledge of it as a "Model Farm," claiming no ordinary amount of attention in this neighbourhood. We knew this farm antecedent to its coming into the hands of the Commissioners of National Education, since which period we have been every day conversant with its working, and are fully cognizant of the beneficial influence it has exercised on the husbandry of this neighbourhood. We have, as "practical agriculturists," narrowly watched its operations since the commencement, and feel proud in having this opportunity to record our approval of it, as an educational agricultural institution. The value of such an institution, in an exclusively agricultural district like this, where something of *improved* husbandry was very much needed, can be fully appreciated only by those who have benefited by its example. That this farm has operated successfully in effecting a reformation in farm management in this neighbourhood is an undeniable fact, and that it is eminently calculated to promote still further so desirable an object admits not of a doubt, particularly when it is remembered that there are eight "resident pupils" in the establishment receiving theoretic instruction daily, with ample opportunities of becoming practically acquainted with the practical details of skilled husbandry; and that there are "Industrial and Agricultural Classes," who also participate in these advantages.

These are facilities by which knowledge may be easily acquired by the members of every grade, who are thus afforded equal opportunities for advancing themselves in every department of so essential an education. It must therefore be apparent that the rising generation will derive knowledge from sources unknown to their fathers, and that the time is fast approaching when the benefits of industrial education will be acknowledged, and the condition of the people be generally ameliorated by its operation. A mere outline of the opportunities afforded in the Athy District Model School should be a sufficient inducement for every parent to secure a position therein for his child, while, at the same time, the example set forth on its farm is such as should be imitated by every practical cultivator of the soil.

There is another appendage connected with the working of the Model Farm that we should not pass by unnoticed—namely, the Dairy Department, which is alike creditable to its skilful manager as it is profitable to the Commissioners. We have carefully examined its working, which exhibits a very striking illustration of what dairy management is able to produce when conducted with skill and industry.

P. O'BRIEN,
MICHL. CONEMY, } Valuators.

APPENDIX I.

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Athy Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	626	5	6
" Paid for Labour,	195	4	1
" Free Labour of Pupils,	12	10	0
" Paid for Farm Seeds	19	4	1
" " Manures,	14	13	1
" " Cattle,	30	0	0
" " Feeding Stuffs,	16	9	0
" " Implements and Repairs,	14	0	1
" " One year's Rent of Farm,	90	0	0
" " " Poor Rate,	12	11	0
" " " County Cess,	9	6	11
To Profit and Loss for balance, being gain on the year,	83	11	9
	£1,123	15	6

Cr.

	£	s.	d.
By amount received for Grain,	49	17	3
" " Roots, &c.,	24	5	4
" " Cattle Sold,	29	3	9
" " Dairy Produce,	82	17	8
" " Eggs and Poultry,	1	13	6
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	935	18	0
	£1,123	15	6

TABLE showing the CROPPING of the Athy District Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Turnips,	8 2 0	Mid. May to mid. June	November and Dec.,	4 lbs.,	20 tons 18 cwt.,	7 5 0	5 5 0	—	
Potatoes,	3 1 0	26th Feb. to 12th Mar.	August & September,	12 cwts.,	7 tons 5 cwt.,	7 15 0	10 7 0	—	
Cabbages,	0 3 0	November & March,	June and July,	18,000 plants,	27 tons 7 cwt.,	6 0 0	7 18 9	—	
Mangel,	2 2 0	1st week May,	November,	5 lbs.,	19 tons 9 cwt.,	8 14 4	8 5 8	—	
Carrots,	0 3 11	Middle April,	Middle December,	7 lbs.,	12 tons 4 cwt.,	8 0 0	16 8 0	—	
Parsnips,	0 1 23	1st week April,	—	7 lbs.,	Not weighed,	8 0 0	—	5 0 0	Nearly destroyed by wire-worm.
Beans,	0 1 0	1st week March,	Last week August,	4 bushels,	15 cwt. 2 qrs.,	7 10 0	—	—	Only middling.
Kohl Rabi,	0 0 30	Seed sown last week March, transplanted last week May,	December,	20,000 plants,	16 tons 4 cwt.,	7 5 0	0 17 0	—	
Rape,	0 1 16	End of June,	October,	3 lbs.,	12 tons 10 cwt.,	4 15 0	1 10 0	—	
GRAIN.									
Flax,	0 1 0	1st week May,	1st week August,	3 bushels,	2 tons 5 cwt.,	3 10 0	—	—	Bad crop.
Wheat,	2 2 0	22nd, 24th Dec., 1853,	1st week September,	6½ to 8 stones,	19 cwt. 2 qrs.,	4 5 0	6 8 0	—	Greatly injured by smut.
Oats,	22 0 0	Mid. Mar. to end April	Mid. Aug. to mid. Sep.	12 stones,	19 cwt. 2 qrs.,	5 10 0	2 6 0	—	
GRASS.									
Pasture,	10 0 0	—	—	—	—	—	—	—	
Soiling,	5 0 0	Partly in spring, in autumn, 1853,	March to July,	4 bushels and 8lbs. clover,	9tns. 12cwt. 1qr. (two cuttings),	2 15 0	5 5 0	—	
Buck wheat,	0 2 0	29th May,	Middle to end July,	4 bushels,	7 tons 8 cwt.,	3 10 0	—	—	Light crop.
Total,	57 1 0								
"STOLEN CROPS."									
Cabbages,	1 3 0	November, 1853,	June, 1854,	20,000 plants,	19 tons,	4 15 0	7 15 0	—	
Rape,	2 2 0	August and Sept.,	November,	—	9 tns. 8 cwt. 1 qr.	1 0 0	2 7 6	—	
Vetches,	2 0 0	October, 1853,	Depastured,	3 bushels, mixed	—	—	—	—	Owing to the short supply of grass in spring, necessity compelled us to depasture.
Total,	6 1 0								

(Signed,) WILLIAM M'MEEKIN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief,

January 20th, 1855.

JOHN MOLENS, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Munster Model Farm.

6. MUNSTER MODEL AGRICULTURAL SCHOOL, County Cork.

January 10, 1855.

As there are no pupils yet instructed at this establishment, the buildings requisite for their accommodation not being yet erected, my observations must be confined to a detail of the farm management and its results for the past year. The cultivation of the farm has undergone a considerable change by the introduction of two implements, viz., Hornsby's sowing machine, and Scouler's two-horse grubber,—the plough having become a secondary implement. In preparing the ground for green crops, the manure is spread on the surface in winter, and ploughed in with a good furrow. In spring the grubber is used once, and again immediately before sowing the seeds. All root weeds are thrown on the surface without breaking or cutting the roots. Winton forks are then used in gathering the couch and other weeds. Hornsby's machine, drawn by one horse, deposits the seeds of carrots, mangels, or turnips, at a distance varying from twenty-two to thirty-three inches, as the case may be, and sows ten statute acres in the day of ten hours. If special manures are used, these are spread on the surface by the hand, and are well harrowed in before the sowing machine, which deposits the seeds on the flat. Cheapness, expedition, regular sowing of seeds at a proper depth, and at a proper season, with the ground in a fine state of tilth, are some of the recommendations of using a drill machine on soil prepared with the grubber, as here described. On dry and well-drained soils this system of cultivation is pre-eminent, and is peculiarly well adapted to sheep farming, where the system of eating off the turnips is extensively adopted. On last season, the flat drills of turnips, on a worse soil with the same manure, produced a considerably heavier crop over the system of raised drills, where the manure was carted into the drills. This season I shall be able to give you some decided experiments on this subject. There is some difficulty in sowing carrot seeds, unless well mixed with pollard or fine bran. The grubber is a most valuable implement in preparing green crop soils for wheat, barley, or oats. The seeds of charlock, or wild mustard, when present in the soil, are, by the use of the grubber, prevented from coming so near the surface as to vegetate, and thus one cause of the yellowness of our corn fields is prevented, as the cultivation of the green crops of the preceding year destroyed the seeds near the surface; but, prepare it by the plough, and the evil is at once manifest.

The comparative quantities of cereal seeds sown on this farm, under the old and present systems, will be seen from the following statement:—

	Wheat.	Barley.	Oats.	
Old plan of broadcast hand-sowing,	10	12	12 to 14	per statute acre.
New system of drill-sowing by machine,	3	4	5 to 6	

The wheat is sown at the distance of thirteen inches in the drill; winter oats, thirteen inches; and barley and spring oats, from seven to twelve inches. These crops are all hand-hoed, at a cost of 2*s.* 3*d.* per acre for each hoeing. The wheat is hoed three times, oats twice, and barley once. The grass seeds and clover are sown at the last hoeing, and are effectually covered by it. The harvesting of these crops is performed as follows:—three mowers with the common scythe, having a cradle attached, each having one woman making bands, one lifting the corn and forming it into sheaves, and a third binding, with two stookers, were able to cut down four acres of standing wheat, or five of barley or oats. The mowers received 2*s.* 6*d.* per day, stookers, 2*s.*, and binders,

APPENDIX I.

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Munster Model Farm.

&c., 1*s.* 3*d.* The cost of reaping and stooking one acre of wheat is 5*s.* 5*d.*, of barley or oats, 4*s.* 8½*d.* per statute acre.

Live Stock and Dairy Management.—To the question, what is the profit realized from dairy farming? very unsatisfactory answers have been generally given. Calculations have been based upon supposition:—a cow giving an average of eight quarts of milk per day, which, at 2*d.* per quart, amounts to £24 6*s.* 8*d.* per annum; the cost of keeping and attending a cow for the same time amounts to £10, the difference being the profit per cow. This sum is never realized, even where the produce is disposed of as new milk in large towns, as the cost of feeding and attendance is necessarily higher in such places. With such loose calculations I trust the following statistical particulars regarding the management of the dairy of the Munster Model Farm during the past year may prove useful. On the 1st of January, 1854, there were five milch cows, some of which calved in July, and others in December, of the previous year. One cow was added on the 1st of February, three in the letter end of April, and the same number on the 1st of June. The total number of cows giving milk to the end of the year was twelve, or nearly ten on an average for the whole year. The produce in butter from these cows was 23 cwt. 3 qrs. 21 lbs., sold in the Cork market for £110 18*s.* 4*d.*; 41,652 gallons of skimmed milk were sold for £23 2*s.* 10*d.*, and 26¾ gallons of sweet milk for 18*s.* 10*d.*; the remainder of the milk was given to young pigs and twelve calves. The surest and most simple way of arriving at the quantity of milk consumed by the calves and pigs, is to deduct the quantity of milk sold from the total yielded by the cattle during the year. From the experiments conducted last summer, it appears that one pound of butter is produced by nine quarts of milk. By a simple calculation we shall find the value of the skimmed milk consumed by the calves and pigs to be £10 4*s.* 5*d.* The calves also consumed for the first three weeks 378 gallons of sweet milk, which, at 6*d.* per gallon, comes to £9 9*s.*

The cows consumed in the six months of summer five acres of Italian rye-grass, which was cut three times, half an acre of cabbages, half an acre of vetches, the leaves of four acres of mangel, and the grass of five acres, set apart for grazing and exercise. In winter they also consumed the produce of five acres of mangel and turnips, or 110 tons of these roots. The straw used for feeding and litter is not taken into account, as the manure is of equivalent value. The cows did not receive hay summer or winter, its place being supplied by barley, oat, or wheat straw.

The following is a summary account of receipts and expenses:—

RECEIPTS.

	£	*s.*	*d.*
By butter sold, ...	110	18	4
,, Milk sold, ...	24	1	8
,, Milk consumed by pigs and calves, valued at . .	19	13	5
	£154	13	5

PAYMENTS.

	£	*s.*	*d.*
To rent and taxes of 10 acres of grass at £2 per acre, .	20	0	0
,, Seeds of clover and grass, ...	5	0	0
,, Cost of raising half an acre of cabbage at £7 per acre,	3	10	0
,, Cost of vetches at £5 per acre, ...	2	10	0
,, Cost of 5 acres of mangels and turnips at £8 per acre,	40	0	0
,, One man, at 7*s.* per week, attending the cows, .	18	5	0
,, One woman, at 3*s.* 6*d.* per week, ...	9	2	6
,, Sundry expenses, including firkins, salt, &c., .	5	10	0
Profit, ...	50	15	11
	£154	13	5

The profit per cow is £5 1*s.* 7*d.*; per acre, £3 3*s.* 6*d.*; the average quantity of milk given by each cow daily is seven quarts; the average number of pounds of butter from each cow's milk in the year is 268, and the average price of butter per pound, a little more than 9¾*d.* The cost of feeding each cow during the year is £7 2*s.*; of attendance, £3 5*s.* 9*d.* The quantity of ground required for the support of each cow per year is 1A. 2R. 16P., statute measure.

The following experiments, conducted with great care, on the different kinds of food usually given to cows, will be found interesting and valuable. The cows were house-fed summer and winter, and had access to a pasture field for four hours daily; in addition to the food mentioned in each experiment, they received oat straw, the refuse of which was used for litter. The milk was measured every morning and evening, skimmed after setting 36 hours, and churned generally in one hour at a temperature of 60°.

These experiments not being so comprehensive as would be desirable, they shall be repeated next season. The grass, clover, cabbage, and mangel leaves were not weighed, but they were given in such quantity as would not disturb the animal system. The influence of a change of food was immediately perceived in an increase of milk; and the effects of the food of the previous week did not extend to the succeeding week, so as to have any influence over the experiment. In reference to the case in which the cows received mangel leaves and cabbages, and in which there is an increase of milk above the previous week, but a less quantity of butter, it is right to observe, that the cows did not seem to relish the cabbages after the mangel leaves, a fact which partly accounts for the result.

No. of Experiment.	No. of Cows.	Date at which Experiment was finished.	Kind and quantity of feeding per head, daily.	Duration of Experiment.	PRODUCE.			No. of Quarts of Milk to produce 1 Quart of Cream.	No. of Quarts of Cream to produce 1 lb. of Butter.	No. of Quarts of Milk to produce 1 lb. of Butter.
					Gallons of Milk.	Quarts of Cream.	Pounds of Butter.			
				Days.						
1	7	April 11, .	70 lbs. of mangel and 50 lbs. turnips, .	3	42¾	23	19	7·43	1·21	9
2	12	July 11, .	Italian rye-grass, *ad libitum*, . . .	7	173	115	75	6·01	1·53	9·22
3	12	Sept. 18, .	Second cutting of clover, . . .	7	131	88	60	5·95	1·46	8·73
4	12	Sept. 25, .	Cabbages, . .	7	144	92	62	6·26	1·48	9·29
5	12	Oct. 2, .	Mangel leaves and cabbages, . .	7	162	94	60	6·89	1·56	10·8
6	12	Oct. 9, .	Mangel leaves alone,	7	212	127	86	6·67	1·47	9·86
7	12	Dec. 1, .	50 lbs. of mangel and 60 lbs. of turnips, .	7	168	93	74	7·22	1·25	9·08

Experiments.—During the past year I instituted a number of experiments, similar to those detailed in my first report, and I now beg to submit the particulars thereof, with the results obtained, in the hope that they may not only prove instructive, but tend to elicit further investigation and inquiry.

[No. 1, EXPERIMENT.

No. 1, EXPERIMENT.—Laing's Swede Turnip.

Kind of Manure.	Quantity of Manure per acre.	Cost of Manure.			Weight of roots per acre.			Value of roots per acre.			Cost of cultivation per acre.			Profit.		
		£	s.	d.	tns.	cwts.	qrs.	£	s.	d.	£	s.	d.	£	s.	d.
Farm-yard manure, . .	25 tons, .	5	0	0	23	12	0	11	16	0	5	0	0	1	16	0
Farm-yard manure, . .	12½ tons,	3	18	0	22	0	0	11	0	0	5	0	0	2	2	0
Peruvian guano, . .	2 cwt.,															
Farm-yard manure, . .	12½ tons,	3	6	0	21	11	0	10	15	6	5	0	0	2	9	6
Bernal's peat manure guano,	2 cwt.,															
Farm-yard manure, . .	12½ tons,	3	6	0	21	8	0	10	14	0	5	0	0	2	8	0
Perry's superphosphate, .	2 cwt.,															
Farm-yard manure, . .	12½ tons,	3	6	0	20	12	0	10	6	0	5	0	0	2	0	0
Goulding's superphosphate,	2 cwt.,															
Farm-yard manure, . .	12 tons,	3	2	0	21	8	0	10	14	0	5	0	0	2	12	0
Home-made superphosphate,	2 bushels,															

No. 2, EXPERIMENT.—Laing's Swede Turnip.

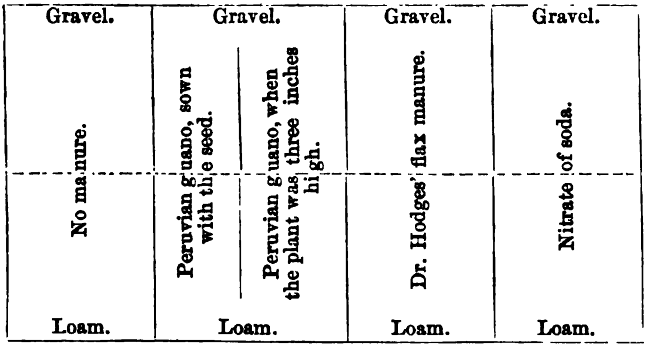
Peruvian guano, . .	4 cwt., .	2	16	0	20	14	3	10	7	4	5	0	0	2	11	4
Bernal's peat guano, . .	8 cwt., .	2	16	0	16	14	0	8	7	0	5	0	0	0	11	0
Perry's superphosphate, .	8 cwt., .	2	16	0	17	0	0	8	10	0	5	0	0	0	14	0
Goulding's superphosphate,	8 cwt., .	2	16	0	15	15	0	7	17	6	5	0	0	0	1	6
Home-made superphosphate,	5 bushels, .	2	16	0	17	13	0	8	16	6	5	0	0	1	0	6

No. 3, EXPERIMENT.—Laing's Swede Turnip.

Peruvian guano, . .	4 cwt., .	2	16	0	20	14	3	10	7	4	5	0	0	2	11	4
Bornal's peat guano, . .	4 cwt., .	1	8	0	14	13	0	7	7	6	5	0	0	0	19	0
Perry's superphosphate, .	4 cwt., .	1	8	0	15	5	0	7	15	6	5	0	0	1	7	6
Goulding's superphosphate,	4 cwt., .	1	8	0	14	16	0	7	8	0	5	0	0	1	0	0
Home-made superphosphate,	2½ bushels, .	1	8	0	16	0	0	8	0	0	5	0	0	1	12	0

In the above experiments there are a few facts to which I wish to direct attention; first, that superphosphate, when combined with farm-yard manure, produces a more superior crop than when it is applied alone, while the succeeding grain crops and grasses are also better; second, that guano, although not producing so heavy a crop as farm-yard manure, yet, on account of its portableness, &c., returns a greater money profit, and is the only special manure to be trusted to alone, from its containing the greatest number of the constituents required for plants; third, that some home-made superphosphate, or dissolved bones, proves superior to the other different manures, as sold in the market, although these are very superior of their class. To make these experiments more valuable for future reference, it would be well if the samples of manures experimented upon were taken from the bulk, and their analyses published along with the experiments.

Flax Experiments.—These experiments were conducted somewhat similarly to those which failed in 1853, on account of the severe drought of that summer. The ground was prepared in the usual manner, and the preceding crops were turnips grown on farm-yard manure in the summer of 1851. Wheat succeeded the turnip crop, both of which gave good average returns. Turnips were again sown in 1853, and manured with two cwt. of Peruvian guano, and four bushels of dissolved bones. This crop was pretty good. The portion of ground selected was clean, and in good tilth, having, during the spring, received several grubbings; the seed was sown on the 7th of May. The soil is of the red sandstone, porous, dry, and warm, and is not considered a good flax soil. The different plots, of one rood each, ran the entire length of the field, and cut two soils different in physical qualities. The manures sent down by the Flax Improvement Society were guano, and Dr. Hodges' flax manure, to which I added a third, namely, nitrate of soda. I here annex a sketch of the field; the dotted line marks the division of soil:



The Peruvian guano was applied at the rate of two cwt. to the acre; nitrate of soda, one cwt.; and Dr. Hodges' manure, at the rate recommended by the Flax Society. On examining the plots carefully in the early part of August, I found the manures on the lower part of the field (loam) had effected no difference in the strength, appearance, or value of the crop in the different plots, the manured plots being very little superior to the plot that received no manure. On the upper part of the field (gravel) I found guano to take the lead, but no difference perceptible in the plots sown with guano at different times. Dr. Hodges' manure and nitrate of soda appear to be about equal. The crop was pulled in the early part of September, and the seed was immediately rippled. The flax straw was weighed before steeping, and after lifting off the grass. The weights of the straw, and seeds, produced by the different manures are shown in the following table:—

	No manure.			Peruvian guano.			Dr. Hodges' flax manure.			Nitrate of soda.		
	cwts.	qrs.	lbs.	cwts.	qrs.	lbs.	cwts.	qrs.	lbs.	cwts.	qrs.	lbs.
Weight of flax seed .	0	2	1	0	2	22	0	2	16	0	2	8
Weight of dried straw, before steeping .	4	0	14	4	3	0	4	0	0	4	0	0
Weight of dried straw, after grassing, .	3	1	21	3	3	0	3	0	14	3	0	0

Lois Weedon system of growing wheat.—Half an acre of a very poor soil was set apart in the middle of April, and sowed with oats as a preparatory crop, as recommended by Mr. Smith.

The produce in oats was nine and three-quarter barrels. The fallowed portion is now sown with wheat at one and a-half stones to the acre. I have also sown as an ordinary crop, one acre of wheat (Lois Weedon) at one and a-half stones, to be followed by the customary crops of the rotation. In my next report, I hope to be able to give the results.

Bushe and Barter's system of feeding pigs with pulped food was carried out on this farm for eight months with five pigs; but it was given up in consequence of losing two pigs out of the five, and from

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the great difficulty of getting the pulped food uniformly fermented, and also because of the great expense of pollard and meal to bring the pigs into any sort of condition. I find it to be more profitable to boil a certain quantity of turnips, and to mix the boiled food with the meal, and to give the pigs in the middle of the day a certain quantity of raw mangel roots.

"*Permanent Improvements.*"—Those effected last year were erecting implement and cattle sheds, levelling 150 perches of fence, and constructing 60 perches of a main drain.

D. CUNNINGHAM, Agriculturist.

[SUMMARY, &c.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	795	4	6
„ Paid for Labour,	214	4	6
„ Miscellaneous,	49	17	8
„ Paid for Farm Seeds,	30	5	0
„ „ Manures,	63	5	6
„ „ Cattle,	250	0	0
„ „ Feeding Stuffs,	11	3	2
„ „ Implements and Repairs,	41	3	8
„ „ One year's Rent of Farm,	215	13	0
„ „ „ Poor Rate,	22	9	6
„ „ „ County Cess and Income Tax,	32	14	6
To Profit and Loss for balance, being gain on the year,	168	10	5
	£1,894	11	5

Cr.	£	s	d.
By amount received for Grain,	298	12	1
„ „ Roots, &c.,	185	17	4
„ „ Cattle Sold,	27	15	6
„ „ Dairy Produce,	135	0	0
„ „ Eggs and Poultry,	4	17	6
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements (deducted 10 per cent. on tear and wear of implements and permanent improvements),	1,242	9	0
	£1,894	11	5

TABLE showing the CROPPING of the Munster Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Carrots,	3 2 0	April,	November,	6 lbs.,	12½ tons,	7 13 0	3 0 0	—	
Mangels,	5 0 0	1st May,	November,	4 lbs.,	17 tons,	7 10 0	1 0 0	—	
Turnips,	15 0 0	May and June,	Winter,	3 lbs.,	16 tons,	6 15 0	1 5 0	—	
Cabbages,	0 2 0	March,	September,	—	22 tons,	6 0 0	4 0 0	—	
Potatoes,	3 1 0	February,	September,	56 stones,	3 tons, 12 cwts.,	7 10 0	3 0 0	—	
Beans,	0 2 0	February,	September,	6 stones,	23 cwts.,	5 0 0	2 10 0	—	
GRAIN.									
Wheat,	6 2 0	November and Feb.,	August,	8 stones,	5½ barrels,	3 10 0	2 12 0	—	
Oats,	4 0 0	April,	August,	5 stones,	11 barrels,	2 5 0	2 4 0	—	
Barley,	15 2 0	May,	August,	6 stones,	8¼ barrels,	2 5 0	2 4 0	—	
Flax,	1 0 0	May,	September,	2½ bushels,	—	4 10 0	1 5 0	—	
GRASS.									
Hay,	3 0 0	May,	June,	—	2½ tons,	1 5 0	2 5 0	—	
Soiling,	5 0 0	—	—	—	—	—	2 5 0	—	
Grass,	49 3 17	—	—	—	—	—	0 15 3	—	
Waste, &c.,	14 1 0	—	—	—	—	—	—	—	
Total,	126 3 17								
"STOLEN CROPS."									
Vetches,	3 0 0	November,	—	2 bushels,	—	—	—	—	
Rye,	1 2 0	November,	—	6 stones,	—	—	—	—	
Total,	4 2 0								

January 1, 1855.

(Signed), D. CUNNINGHAM, Teacher.

II. Appendix to Dr. Kirkpatrick's Report.

Glandore Model Farm.

7. GLANDORE CENTRAL MODEL AGRICULTURAL NATIONAL SCHOOL, County Cork.

January 9, 1855.

Agricultural Boarders.—Since first of June two boys were admitted into this class—one being a free pupil selected from the "Agricultural Class," attending the Glandore School—the other a paying boarder. Two other applicants presented themselves, and will, I trust, soon be admitted. It is to be regretted that none of these (except the free pupil) is from the immediate locality of the School, which is to be attributed either to the ignorance of the farmers, of the advantages available in this institution, or their inability to pay the small sum of £6 per annum towards the maintenance and education of their sons, and not to a defect in the system of agricultural education carried out here. It is gratifying to find applicants coming from a distance willing to pay the required stipend. Besides devoting the mornings (Saturday excepted) to giving agricultural instruction to the boarders, they are, permitted to attend the school, three days in the week, during the hour of agricultural instruction: the evenings are devoted to *literary* instruction, under the superintendence of the Teacher of the Glandore National School. In both departments they seem to have made a fair progress, and their conduct in every other respect is commendable.

Agricultural Class.—The attendance in this class has increased considerably for the last six months, and at present numbers twenty-eight. The hour for giving agricultural instruction is rather inopportune—after the literary business of the day is over: a change in the hour of giving instructions would, in my opinion, insure a larger attendance, and cause better attention to be paid to the subject.

Industrial Class.—This class has not yet been established; but I have reason to hope it will be in full operation in the ensuing spring. I believe the names of twelve boys, who are anxious to join this class, have been forwarded to the Commissioners for their approval.

Model Farm.—The crops cultivated this year succeeded very fairly; particularly the green crops. Some experiments were tried on different varieties of turnips and mangels, but circumstances prevented me from conducting them with that degree of accuracy which would justify me in publishing the results as data for the guidance of others. These experiments shall again be repeated, and the result of each carefully and correctly tabulated. The field in clover (two and a-half acres) yielded abundantly; and with the addition of half an acre of winter vetches, and three and a-half acres of inferior pasture, supported, from the 6th May to the middle of September, eight milch cows, one horse, and for the most part, three pigs.

Live Stock and Dairy Management.—Gentlemen of good experience in feeding stock wonder how the stock on this farm can be kept in such a high condition, and at the same time admire the system and economy of having a sufficiency of feeding throughout the year. The dairy department has been attended with considerable success; the produce obtained from eight milch cows realized the handsome sum of £62 13*s.* 2*d.*, not taking into account the large quantity of milk given to calves and pigs. The milk is regularly set in glazed earthen vessels for forty-eight hours (the period is generally longer in winter), the cream taken off is put into a large crock, and churned once a week. The butter is of a superior quality and brings the highest price in the market. The cattle are principally house-fed, and are in a high and thriving condition.

Manures.—The greatest attention has been paid to the collection of manure; the dung from the stable, cow-house, piggery, &c., is daily conveyed to the manure yard, and to prevent any of the valuable part from escaping it is regularly covered over with peat-mould; and, as there is no tank, I endeavour to have a supply of dry peat at hand to absorb the liquid as it passes from the cow-shed; occasional layers of seaweed also go to make up the manure heaps. Guano (2 cwt. to the acre) in conjunction with half farm-yard manure (15 tons) was used for the growth of Swede turnips: the result was very favourable. Guano (same as before) and seaweed were also used for the growth of turnips, but not with the same amount of success as in the previous case.

Permanent Improvements.—There were many *important* and *necessary* improvements undertaken during the year; first, the making of an approach road, but the credit of this I will leave to my predecessor, Mr. Kenny, who had it laid out before I took charge; secondly, draining and reclaiming a rood of ground, formerly a fish pond, at the entrance gate. This has cost a large sum of money, and probably the wiser course would have been to leave it as it was; but that it occupied so conspicuous a position, and formed an eye-sore in the appearance of the farm, besides it answered as a convenient receptacle into which were carted large mounds of rubbish which surrounded the farm buildings, so that two great objects, that of filling the pond and getting rid of the rubbish, were accomplished at the same time. The pond is now nearly filled, and will, I have no doubt, be the most valuable portion of the farm; part of it is intended as a kitchen garden. Third, removing rocks from around the building; all these are in a forward state, and will take but a short time to have them fully completed.

Progress of Agricultural Improvement.—I am of opinion that a considerable amount of progress in improved agriculture has been made in this locality. I had an opportunity of knowing this place a few years antecedent to my appointment as agriculturist; and from what I then saw of the country, and contrasting it with its present advanced and prosperous state, I think I am not over sanguine in stating that a vast deal of good has been accomplished. That a Model Farm placed in a locality a few years ago, as backward in modern agriculture as any in Munster, must, it is evident, have assisted in promoting this change; and will, I trust, by its teaching and example, be the means of inciting still more to follow its example, and adopt its improved principles.

HUGH DELANY, Agriculturist.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	317	2	9
" Paid for Labour,	93	2	6¾
" Free Labour of Pupils,		—	
" Paid for Farm Seeds,	12	14	0
" " Manures,	10	5	6
" " Cattle,	1	2	0
" " Feeding Stuffs,	18	17	5¼
" " Implements and Repairs,	13	17	1½
" " One year's Rent of Farm,	31	0	0
" " " Poor Rate,	2	0	0
" " " County Cess,	1	0	0
	£501	2	1½

Cr.	£	s.	d.
By amount received for Grain,	19	4	5½
" " Roots, &c.,	14	9	1
" " Cattle Sold,	28	13	2
" " Dairy Produce,	62	13	5
" " Eggs and Poultry,	0	5	10½
" Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	364	6	6
By Profit and Loss, being loss on the year,	11	9	7½
	£501	2	1½

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Glandore Model Farm.

TABLE showing the CROPPING of the Glandore Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Turnips,	3 2 22	May,	December,	4 lbs.,	16 tons,	6 0 0	10 0 0	—	The Turnips and Mangels were very good crops.
Mangels,	1 2 37	27th April,	20th November,	7 lbs.,	22 tons,	5 11 4	14 9 8	—	
Carrots,	0 1 9	8th April,	28th October,	6 lbs.,	11 tons,	5 10 0	11 10 0	—	A fair crop.
Potatoes,	0 3 15	March,	August and Sept.,	10 cwt.,	2 tons,	7 12 0	—	2 12 0	The Potato blight made its appearance before the crop was half matured, this accounts for the loss.
Cabbages,	0 1 13	March and April,	Fed off,	—	—	—	—	—	
Vetches,	0 1 27	March,	Do.,	3 bushels,	8 tons,	4 10 0	1 10 0	—	
GRAIN.									
Barley,	1 3 5	24th April,	7th September,	11 stones,	6½ barrels,	3 16 0	2 12 10	—	
Oats,	5 1 14	March,	August,	9 stones,	5 barrels,	3 0 0	2 0 0	—	The Oats were sown in drills, from 8 to 9 stones to the acre—a very fair crop.
Rye,	0 1 0	March,	Cut green,	3 bushels,	No estimate,	Cannot tell.	—	—	
Flax,	0 0 26	April,	July,	3 bushels,	Not ascertained,	5 5 0	—	—	
GRASS.									
Grass and Clover,	2 2 0	—	May, June, &c.,	3 bushels, including clover & rye-grass,	10 tons, green,	—	—	—	The Clover was a very good crop, and afforded three cuttings during the season.
Grazing,	3 2 22	—	—	—	—	—	—	—	
Total,	20 3 30								
Waste,	4 0 18	—	—	—	—	—	—	5 16 0	
"STOLEN CROPS."									
Vetches,	1 0 0	October,	June,	3 bushels with 1 of Oats,	10 tons,	—	—	—	Winter Vetches were good—the Rape almost a failure.
Rape,	2 0 0	October,	April,	—	—	—	—	—	
Cabbages,	0 2 0	July and August,	—	—	—	—	—	—	
Total,	3 2 0								

(Signed), HUGH DELANY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief,

5th January, 1855.

WM. FITZJAMES BARRY, Manager.

8. FARRAHY MODEL AGRICULTURAL NATIONAL SCHOOL, County Cork.

II. Appendix to Dr. Kirkpatrick's Report.

Farrahy Model Farm.

10th January, 1855.

Agricultural Instruction.—Agricultural Boarders' Class.—This class has been constantly filled. Since my last Report three of its members have been admitted to the Albert National Agricultural Training Institution, at Glasnevin. Several applications have been made by the farmers of this locality, and land-stewards, (both Irish and Scotch) to have their sons admitted into this class, but owing to our limited accommodation we were unable to accede to them until a vacancy would occur, which seldom happens, in consequence of the few members composing the class; besides the advanced boys attending the literary school always get the preference when these vacancies occur; but as the Commissioners have granted permission to have the number increased from four to six, it will be of the greatest benefit to those persons who are desirous of becoming members, and who were, for the cause above stated, unable to do so heretofore. The conduct of the young men and their attention to business are, as usual, exemplary; the most undisturbed harmony characterising their intercourse.

Agricultural Class.—The number of pupils in this class is equal to that in my last Report; and they have acquired a considerable amount of agricultural knowledge, take a great interest in the system, and pay particular attention to all the agricultural subjects brought under their notice.

Industrial Class.—This class consists of six of the most advanced pupils in the agricultural class, who assist in the operations of the farm during the time specified in the rules for the regulation of this class. They have at all times given me the greatest satisfaction, and have evinced a most zealous desire to become acquainted with the improved system of farming. I could adduce many instances in which members of this class especially are disseminating the principles of the improved system of agriculture amongst their friends and neighbours, by pointing out to them the proper manner to manage their farms, and proving to them the errors they previously laboured under.

Model Farm.—In consequence of the extent of the farm being increased from 18A. 1R. to 41A. 3R. 8P. the farmers now pay more attention to its progress, as they find its present size corresponds more to their own circumstances than it formerly did. From this fact alone much good may be expected, as the persons that are continually visiting it can see many rotations carried out, and crops grown superior to any in the district, where but a few years ago nothing but heather and furze were to be seen, and thereby be stimulated to adopt a similar system; besides, the young men in connexion with the establishment can have an opportunity of seeing things carried out on a more extended scale, also contrasting the appearance which it presented when it came into the hands of the Commissioners with that which it now presents.

Crops.—Those on the old farm were above an average, as a reference to the statistics will show. Owing to the late period of the season at which the new portion came into possession, I was enabled to till only five and a-half statute acres, which I cropped with Swede turnips. This portion, like the rest, was almost barren, having but a few inches of active soil overlying an ochrey incrustation, termed pan; this I had to get broken by subsoiling, as the soil was overrun with couch and weeds of every description that grow in impoverished land. After enormous labour I got them collected and burned, the season being favourable for this operation. I got the turnip seed sown at the proper season, which I manured with the ashes of the weeds in conjunction with guano. In consequence of the neglected manner in which this portion was treated by its former occupants, the seeds of weeds which had lain dormant in it germinated extensively, consequently the after-culture was attended with considerable expense—but under the circumstances the crop was excellent.

Live Stock.—They consist of one mare and foal, three milch cows, two plough bullocks, one bull, two heifers, one calf, and eleven pigs. Owing to the increased extent of the farm, and the new portion being principally in pasture, the house-feeding system was not so strictly adhered to as in former years, as I was compelled to admit them out to pick the scanty herbage which it produced; but since the end of September I had them confined to their stalls, with the exception of a few hours daily on a portion of ground allotted to them for exercise. The dairy is managed according to the most improved method. This being a dairy district there is no demand for milk; besides two of the cows were strippers, consequently my profits, under this head, were not as much as might be expected.

Manures.—Of this important substance the greatest care is taken both for its collection and preservation. It was applied to the different green crops in conjunction with guano on the old farm, care being taken to cover it as soon as possible after the drills were opened; by this means, which I have practised for the last four years, I have never had a failure in the turnip seed, &c.

Permanent Improvements.—These were of a very extensive nature; the land being previously held by several occupants, from which it can be inferred that the whole was irregularly divided into small plots by banks of earth and stones, not worthy the name of fences, and these plots were in such a neglected state, that the heather had once more established its reign in them. During the summer, I got all those interior banks or fences levelled to the amount of 560 perches, together with filling up all the inequalities in the plots. I also got a mearing fence built 190 perches long, faced at both sides with stones and sods, and planted with white thorn quicks in front and furze plants on the top. I had likewise to make fifty perches of an embankment to prevent the inroads of a mountain river which passes along the eastern boundary of the farm—by this means I gained a considerable portion of land, besides preserving a large portion from being washed off annually by the torrent. I subsoiled eleven and one-half statute acres by the plough and manual labour in conjunction. The plough was drawn by two bullocks, and turned the soil to the depth of twelve inches, the workmen following in the wake of the plough with spades, picks, &c., broke up the subsoil to the depth of twelve inches more. I also thorough drained three statute acres with drains four feet deep by forty apart, the subsoil being of such a porous nature, admitted them to be placed so far asunder. I may here state that I have the whole farm laid off in divisions without an interior fence appearing therein. The "three" and "four" course rotations in full operation; and the five will be fully established on the ensuing season.

Progress of Agricultural Improvements.—When the Commissioners selected this land to be cultivated as a "Model Farm" it was considered by the inhabitants of the surrounding district as an impracticable undertaking which could never be attended with success, as they thought it impossible to bring it to that state in which the crops grown thereon would pay the expense of cultivation; but they have since been led to believe the contrary, and made sensible that land, however barren, may, by judicious management, be made to produce remunerative crops. The people, from their acquaintance with this farm and the crops

Farrahy Model Farm.

grown thereon, now properly appreciate the value of artificial manures, and consequently, the culture of green crops has recently become widely extended throughout this district.

I feel great pleasure in submitting the testimony of the following reverend gentlemen, who have at all times zealously endeavoured to promote the welfare and improvement of this establishment, as to its continued successful working:—

The Rev. W. Maziere Brady, Rector of Farrahy, thus writes:—

Farrahy Rectory, 25th January, 1855.

I am happy to be able to certify, that the management of the Model Farm at Farrahy continues to be in every way satisfactory. I have no hesitation in declaring that the very good example set by Mr. Smith has been followed in numerous instances which have come under my personal observation; and I firmly believe that a large amount of good would result to the country were similar establishments (judiciously managed) more generally patronised.

W. MAZIERE BRADY, A.M., Rector of Farrahy.

The Rev. W. O'Sullivan, P.P., Kildorrery, thus writes:—

The character of the Farrahy Model School is held here in great respect, and very deservedly. The farming operations are considered to be very scientifically conducted by Mr. Smith. Mr. Smith's character is excellent here; attentive and obliging to the people in every way he can serve them.

W. O'SULLIVAN, P.P.

Kildorrery, 22nd January, 1855.

I trust I shall always so conduct the business of this Institution as to merit such favourable opinions from its friends.

BERNARD SMITH, Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Farrahy Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	239	7	4
" Paid for Labour,	82	13	10
" Free Labour of Pupils,	6	0	0
" Paid for Farm Seeds,	14	6	4
" " Manures,	20	19	9
" " Cattle,	23	11	10
" " Feeding Stuffs,	28	19	11
" " Implements and Repairs,	22	8	3
" " One year's Rent of Farm,	23	11	2
" " " Poor Rate,	2	3	8
" " " County Cess,	0	14	3
To Profit and Loss for balance, being gain on the year,	48	8	6
	£456	1	2

Cr.

	£	s.	d.
By amount received for Grain,	12	10	4½
" " Roots, &c.,	10	19	9
" " Cattle Sold,	18	3	8
" " Dairy Produce,	17	11	4
" " Eggs and Poultry,	0	12	1½
" Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	453	7	7
	£456	1	2

TABLE showing the CROPPING of the Farrahy Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Three Course.									
Turnips, Swedes,	0 2 0	1st week in May,	3rd week in Nov.,	4½ lbs.,	23tns.17cwt.2qr.	8 15 0	11 5 0	—	An excellent crop, free from [disease.
Carrots, white,	0 3 0	16th April,	1st week in Nov.,	8 lbs.,	17 tons, 4 cwt. 3 qrs. 11 lbs.	10 5 0	13 10 0	—	A good crop would have been better, but a great many started to seed.
Mangels,	0 2 0	1st May,	1st week in Nov.,	5 lbs.,	14 tons, 1 qr.,	10 5 0	4 0 0	—	
Cabbages,	0 1 20	2nd week in May,	Used in Summer,	4,840 plants, 27×18,	Not taken,	10 0 0	—	—	
Four Course.									
Turnips, Swedes,	2 0 0	3rd week in May,	27th November,	4½ lbs.,	27 tons, 5 cwt.,	12 0 0	11 10 0	—	
White Globe,	1 0 0	12th July,	December,	4½ lbs.,	16 tons, 3 qrs.,	6 15 0	1 5 0	—	
Five Course (Paddock).									
Turnips, Swedes,	4 2 20	3rd week in May,	December,	5 lbs.,	24 tons,	12 10 0	7 10 0	—	
Potatoes,	1 1 10	1st week in March,	September and Oct.,	13 cwts.,	2 tons, 10 cwt.,	8 0 0	—	2 13 4	Blighted very early in the season—a bad crop.
GRAIN.									
Three Course.									
Oats, black, and grass seeds,	2 2 10	1st week in April,	1st week in Sept.,	14 stones, Oats, 2 bush. Ital. and 14 lbs. Red Clover,	Not ascertained,	8 18 4	1 10 0	—	A fair crop, but was much injured from drought in May and June.
Four Course.									
Oats, Tartarian,	4 2 20	1st week in April,	2nd week in Sept.,	16 stones,	Not ascertained. Average 6 barls. per valuation,	8 18 4	1 10 0	—	
GRASS.									
Italian and Perennial, and Red Clover,	4 2 0	1st week in April,	Through Summer for soiling,	2 bushels, and 14 lbs. Red Clover,	3 cuttings—1st 5, 2nd 4, and 3rd 2 tons,	—	—	—	A light crop owing to the drought in spring.
Pasture and Waste,	10 0 8½	—	—	—	—	—	—	—	
Total,	41 3 8½								
"STOLEN CROPS."									
Rape,	0 2 0	12th September,	Cut in April,	9,570 plants,	10 tons,	1 10 0	—	—	A good crop.
Winter Vetches,	1 1 0	16th October,	Cut when in flower,	3 bush. and 1 of Rye,	11 tons,	2 10 0	—	—	A fair crop.
Cabbage Plants,	0 3 0	1st week in August,	—	10 lbs.,	—	—	—	—	An excellent crop.
Total,	2 2 0								

(Signed,) BERNARD SMITH, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 27, 1855.

W. MAXIERE BRADY, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Tervoe Model Farm.

9. TERVOE MODEL AGRICULTURAL SCHOOL, County Limerick.

Agricultural Instruction.—The pupils receiving agricultural instruction consist of sixteen boys selected from the more advanced pupils in the school. They have made considerable progress, and manifest a strong desire for the acquirement of agricultural knowledge; but they will not consent to work on the farm for the remuneration allowed, and therefore there is no Industrial Class yet established, which is a great drawback.

Model Farm.—The general system of management pursued on the Model Farm was stated in my former Reports; and as there was no alteration made during the past year, it is unnecessary for me again to detail it.

Cropping.—The crops in general were very productive. The Swede turnips were not so heavy as in former years, but on the whole they amounted to an average crop. Mangels and carrots were better than on any other occasions, showing the great utility of deepening the soil intended for them. The flax crop was not near an average, being sown on that portion of the farm which was lately reclaimed—the surface soil in many places being removed to fill up hollows. It was the same with the barley and oats sown in that division, the latter scarcely remunerating for seed and labour. This division, I am glad to say, is now laid down with clover and grass seeds, and, from its present luxuriance, promises a heavy return of hay next year.

Live Stock.—The house-feeding of cattle is closely attended to, with perfect success. The only loss I have to regret as having occurred during the year is two pigs, by distemper.

Dairy Management.—The dairy produce sold during the year amounts to £33 9*s.*; but this sum does not include all the receipts from that department, as I sold two fat calves, for which I received £8 7*s.*, fed exclusively on new milk, and being worth no more than 7*s.* at the time they were calved. This sum of £8 should, therefore, be added to the amount received for dairy produce—making, in all, £41 9*s.* This amount was realized from the produce of five cows and a stripper; and I have not taken into account the support of two other calves, and the milk given to pigs.

Permanent Improvements.—The erection of a boundary fence round the north side of the farm; the reclaiming of waste land; and the deepening of that portion intended for green crops next season, by trench ploughing and removing the stones which obstructed the plough; are the principal improvements connected with the farm during the past year.

DAVID POUNCH, Agriculturist.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Tervoe Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year, with proportion of Improvements,	291	10	0
,, Paid for Labour,	51	2	7½
,, Free Labour of Pupils,	2	7	6
,, Paid for Farm Seeds,	4	12	7½
,, ,, Manures,	11	2	6
,, ,, Cattle,	27	15	0
,, ,, Feeding Stuffs,	8	14	0
,, ,, Implements and Repairs,	7	3	0
,, ,, One year's Rent of Farm,	29	8	0
,, ,, ,, Poor Rate,	—		
,, ,, ,, County Cess,	—		
To Profit and Loss for balance, being gain on the year,	17	10	4
	£451	5	7

Cr.	£	s.	d.
By amount received for Grain,	33	7	4
,, ,, Roots, &c.,	11	9	3
,, ,, Cattle Sold,	43	8	9
,, ,, Dairy Produce,	33	9	1
,, ,, Eggs and Poultry,	3	13	2
,, Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	325	18	0
	£451	5	7

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Tervoe Model Farm.

TABLE showing the CROPPING of the Tervoe Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	1 2 20	March,	October,	48 stones,	576 stones,	4 7 6	13 12 6	—	Crop sound.
Turnips,	3 1 18	May,	December,	5 lbs.,	27 tons, 13 cwt.	3 9 0	14 9 0	—	Crop sound.
Mangels,	1 2 0	April,	November,	7 lbs.,	28 tons,	3 11 0	17 0 0	—	
Carrots,	0 1 20	April,	November,	6 lbs.,	8 tons,	3 12 0	4 8 0	—	Sown alternately with mangels.
Kohl Rabi,	0 0 12	May,	December,	6 lbs.,	13 tons,	3 10 0	—	—	
GRAIN.									
Oats, with seeds,	2 2 0	March and April,	September,	10 stones,	98 stones,	4 17 0	0 1 0	—	The crop in places lodged, and was much injured.
Oats alone,	3 2 18	March,	September,	12 stones,	190 stones,	6 12 0	4 0 0	—	Also lodged.
Barley,	0 2 0	April,	September,	14 stones,	112 stones,	6 12 0	1 5 0	—	A fair crop.
Wheat,	1 2 0	December,	August,	10 stones,	Not ascertained,	7 0 0	—	—	Also lodged.
Flax,	0 2 0	April,	August,	2¼ bushels,	2 tons, 10 cwt.	6 10 0	—	—	
GRASS.									
Italian Rye-grass & Clover,	3 2 20	April, 1853,	May, June, &c.,	2½ bushels rye-grass, 20 lbs. clover,	12 tons, 18 cwt.,	2 17 9	16 0 0	—	The grass in a green state weighed 15 tons 17 cwt. per statute acre, 4 tons 5 cwt. in a dry state.
Total,	18 2 28								
"STOLEN CROPS."									
Vetches,	0 1 20	September,	May,	3 bushels, 1 st. oats,	8 tons,	3 16 0	13 10 0	—	
Cabbages,	0 0 12	May and June,	—	—	5 tons,	3 12 0	—	—	
Stone turnips,	0 1 10	October,	December,	Transplanted,	8 tons,	3 8 0	5 0 0	—	
Total,	0 3 2								

(Signed,) DAVID POUNCH, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

16th January, 1855.

J. O'ROBKE, Manager.

Gormanstown Model Farm.

10. GORMANSTOWN MODEL AGRICULTURAL NATIONAL SCHOOL, County Tipperary.

January 12th, 1855.

Agricultural Instruction.—The "Boarders' Class" consists of three young men, with whose conduct and attention to business and study I have every reason to be satisfied.

"Agricultural" and "Industrial" Classes.—The attendance of the pupils constituting those classes has been irregular, owing, in a great degree, to the scarcity of hands, and the increased rates now paid for labour.

Model Farm.—On the 9th of May 27A. 2R. 3P. were added to the farm; and, by the end of the month, 185 perches of useless ditches were levelled on it, seven and a half acres sown with black oats, laid down with clover and grass seeds, and six acres were in course of preparation for turnips. Three acres were sown with Swedes by the 6th of June, and the remainder was sown with various kinds of soft turnips during the month. Manure used: three cwt. of Peruvian guano (from Messrs. Drummond, 58, Dawson-street, Dublin), and four cwt. salt, per acre. Both the oats and turnips were remarkably good, and proved very remunerative. In consequence of the wretched state of the land, and the lateness of the season when it came into my possession, I was obliged to summer-fallow one-half of it. Seven and a-half acres of this lot have been limed, and now exhibit an excellent braird of wheat. Six acres will be under green crops next season—thus establishing the four-course rotation.

The Live Stock comprises four cows, two in-calf heifers, four calves, two horses, and eleven pigs. On account of the limited size of the old farm, four calves had to be sold in the months of March and April, for £20 2*s.* 6*d.* In future I expect there will be no occasion to part with young stock.

Manure.—Every attention is paid to the collection and preservation of manure. The quantity on hand is very considerable, and there is a large compost heap of the entire of the weeds collected off the summer-fallows.

Permanent Improvement consisted in levelling fences, old houses, and drawing materials for building a boundary wall along the road side of the farm.

The agriculture of this district is becoming materially improved, and the farmers are consequently attaining a much higher standard of social comfort.

P. R. TIERNY, Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Gormanstown Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	310	4	5
" Paid for Labour,	110	7	11
" Free Labour of Pupils,	10	0	0
" Paid for Farm Seeds,	22	16	10
" " Manures,	40	12	5
" " Two Horses,	37	15	0
" " Feeding Stuffs,	14	1	11
" " Implements and Repairs,	7	16	8
" " One year's Rent of Farm (half year's rent for new farm),	34	15	2
" " " Poor Rate (half of),	0	18	7
" " " County Cess,	1	18	6
Miscellaneous,	11	11	7
To Profit and Loss for balance, being gain on the year,	42	14	6
	£645	13	6

Cr.

	£	s.	d.
By amount received for Grain,	61	11	5
" " Roots, &c.,	27	7	3
" " Cattle Sold,	59	5	3
" " Dairy Produce,	33	19	5
" " Eggs and Poultry,	3	11	5
" Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	459	18	9
	£645	13	6

TABLE showing the CROPPING of the Gormanstown Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	1 1 2	April,	October,	11 cwts.,	4 tons, 5 cwt.	5 16 11	10 19 4	—	Perfectly sound.
Mangels,	1 1 28	May,	November,	5 lbs.,	15 tons, 8 cwt.	4 1 8	7 4 7	—	The farm-yard manure is not included in the expenses of cultivation.
Turnips, Swede,	4 0 2	May and June,	Winter,	4½ lbs.,	16tons 14cwt. 2qr.	7 4 0	26 17 2	—	Cost of manure included.
,, Soft,	2 1 35	June,	November and Dec.,	4 lbs.,	15 tons,	6 0 4	8 1 4	—	Remarkably sound, and free from "finger and toe" disease.
Cabbages,	0 2 10	Feb. and March,	Consumed by cattle during the summer and autumn,	10,664 plants,	25 tons, 6 cwt.	6 3 3	9 0 8	—	Remarkably good crop.
Vetches,	1 0 26	Winter & 19th May	Consumed May, June, July, & Aug.	11 sts., oats 3 sts.	12 tons,	—	—	—	
GRAIN.									
Wheat,	2 2 0	December 5th & 6th,	Last week in August,	10 stones 7 lbs.	147 stones,	7 15 2	18 19 5	—	The value of straw not taken into account.
Oats,	11 0 0	Apr. & 3rd week in May	September,	17 stones,	126 stones,	3 7 8	27 18 2	—	The quantity of oat-seed sown was large owing to the lateness of the season.
Fallowed,	15 3 8	—	—	—	—	—	—	—	7½ acres of this lot are sown with wheat, and six acres cultivated for green crops.
GRASS.									
Hay,	3 3 31	April 1853,	June 16th and 17th,	4 lbs. red clover, 4 lbs. cow-grass, 1 bushel Italian, ½ do. perennial,	1 ton 5 cwt. first cutting, (hay); 4 tons soiling, second cutting,	3 14 8	2 8 3	—	
Pasture,	4 1 11	—	—	—	—	—	—	—	
Total,	48 2 3								
"STOLEN CROPS."									
Vetches,	2 0 0	—	—	—	—	—	—	—	
Rape,	0 1 0	—	—	—	—	—	—	—	
Cabbages,	0 0 30	—	—	—	—	—	—	—	
Total,	2 1 30								

(Signed), P. R. TIERNY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 13, 1855.

JOHN BAGWELL, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Leitrim Model Farm.

11. LEITRIM MODEL AGRICULTURAL SCHOOL, County Leitrim.

December 31st, 1854.

Agricultural Instruction—Agricultural Boarders.—Of the six pupils constituting this class at the date of my last Report, five were admitted to Glasnevin, there to finish their course of study, and the other at the termination of his time here, emigrated to America. The vacancies were filled up, and the class continues to give satisfaction.

Agricultural Class.—This class consists, on an average, of ten pupils of the literary school, all of whom now appear to be desirous of getting instruction in the principles of improved agriculture.

Industrial Class.—I regret that as yet I have been unsuccessful in my endeavours to induce the parents to allow their children to work a few hours daily on the farm; but from the system they see pursued, and the crops raised on the farm this year, many of them intimated to me that as soon as the weather gets fine they will be glad to allow their children to enter this class, so that I may expect soon to be able to establish it on a satisfactory footing.

Model Farm.—The results of my labours have turned out profitably; the turnip crop was exceedingly good, and also the mangels and carrots, while the oat crop was superior, both as to produce and quality of grain.

Live Stock and Dairy Management.—The cattle are continually house-fed, and attended to in the usual way. The butter is sold in firkins, except what is used in the establishment. As a proof that good butter can be produced from cows fed on turnips, vetches, &c., I got 3*s.* per firkin above the currency of the market at the time of sale.

Manures.—The principal manures applied were—bog-mould and farm-yard manure, with a light top-dressing of guano to the young turnips, &c., which had a most beneficial effect in pushing the young plants forward.

The only permanent improvements effected during the year were the planting a thorn hedge round the garden, and forming walks between the different divisions, effecting improvements about the literary school, and preparing a play-ground for the children.

CORNELIUS BEHAN.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Leitrim Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	287	19	0	By amount received for Grain,	13	18	0
" Paid for Labour,	46	13	6	" " Roots, &c.,	2	12	8
" Free Labour of Pupils,	5	0	0	" " Cattle Sold,	26	6	0
" Paid for Farm Seeds,	4	9	0	" " Dairy Produce,	32	14	7
" " Manures,	0	18	6	" " Eggs and Poultry,	0	13	7
" " Cattle,	14	0	6	By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	354	8	10
" " Feeding Stuffs,	24	6	7				
" " Implements and Repairs,	2	17	8				
" " One year's Rent of Farm,	12	0	0				
" " " County Cess,	1	19	4				
To Profit and Loss for balance, being gain on the year,	30	9	7				
	£430	13	8		£430	13	8

TABLE showing the CROPPING of the Leitrim Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.		£ s. d.	
GREEN FALLOW CROPS.									
Potatoes,	0 3 0	February,	October,	10 cwt.,	6 tons,	7 10 0	Profit.	—	On the whole extremely good.
Mangels,	0 2 0	May,	November,	5 lbs.,	25 tons,	6 5 0	Profit.	—	
Carrots,	0 1 2	April,	—	—	12 tons,	6 5 0	—	—	
Vetches,	0 1 0	March,	July and August,	12 stones,	10 tons,	2 10 0	—	—	
Turnips,	2 2 0	May,	November,	4 lbs.,	36 tons,	6 5 0	—	—	
GRAIN.									
Oats,	5 0 0	March,	September,	12 stones,	—	2 10 0	—	—	
GRASS.									
Grass,	3 1 0	—	July,	3½ bushels and 10 lbs. clover,	10½ tons,	1 5 0	—	—	
Total,	12 2 2								
"STOLEN CROPS."									
Rape,	1 3 0	September,	April,	—	9 tons,	0 17 6	—	—	
Cabbages,	0 1 0	—	June,	—	17 tons,	0 7 6	—	—	
Total,	2 0 0								

(Signed,) CORNELIUS BEHAN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

10th January, 1855.

F. LA TOUCHE, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballymoney Model Farm.

12. BALLYMONEY MODEL FARM, County Antrim.

January, 1855.

The farm and school buildings not yet being completed, the establishment is not in full operation, consequently I have no observations to offer in reference to "agricultural instruction," "live stock and dairy management," the "collection, preservation, and application of manures," &c. The only subject requiring explanation being the cultivation and improvement of the model farm.

On my entry here, in the middle of February last, I found the farm labour in a very backward state, in consequence of the very heavy fall of snow which had overspread this part of the country a short time previous. As soon as the weather permitted, I commenced operations as vigorously as possible, so as to have the "preparatory tillage" completed in due time; and as hired farm horses were very expensive and difficult to procure, I thought it necessary to recommend the propriety of purchasing a horse, cart, and harness, to assist in the work. This being obtained, I set about the purchase and cartage of manure from the town, as there was none whatever on the land, and in the course of a short time, about 150 loads were accumulated at the head of the field intended for green crops. I paid 2*s.* a load for the manure, and at the rate of thirty loads, or tons, the manuring of a statute acre cost £3.

After the grain crops were sown, and some potatoes and cabbages planted, I commenced to clean a very dirty field of about three acres for Swede turnips. The ground having been previously ploughed into ridges in the autumn, in spring it was cross-ploughed, harrowed, and whatever weeds appeared above the surface picked off; after this operation, it required another ploughing lengthwise, preparatory to grubbing, as the weeds were so abundant as to continually choke up the action of this implement. By a repeated series of grubbings, harrowings, and rollings, the ground was ultimately brought into a proper tilth, though at a very great expense, costing about £3 per statute acre. When thus cleaned, drills were opened, at a distance of twenty-seven inches apart, and half the usual quantity of farm-yard manure applied, with 4 cwt. of Perry's bone compound. This produced a fair average crop of turnips (twenty-two tons), considering the exhausted state of the land. On a portion of the same field I sowed Aberdeen turnips, with 8 cwt. of Perry's manure alone to the statute acre, and had an excellent crop.

There are about 2½ statute acres of this farm composed of soil of a peaty nature, and on this I sowed red and white carrots, and mangels.

The following experiment was instituted in reference to the mangels, with the view of testing the comparative efficacy of Perry's and Ritchie's manures, with the best Peruvian guano, and the following are the results:—

	Cost of Manure.			Produce.		
	£	*s.*	*d.*	tons.	cwt.	
1. 8 cwt. of Perry's bone manure, .	3	0	0	20	15	per statute acre.
2. 4 cwt. best Peruvian guano. .	3	0	0	18	10	,,
3. 8 cwt. of Ritchie's bone manure, .	3	0	0	18	0	,,
4. 30 tons of good farm-yard manure,	3	0	0	22	5	,,

I also tried a similar experiment on the turnip field already alluded to, and found somewhat similar results.

Permanent Improvements.—About three statute acres of ground were thorough drained. The drains were made at a distance of twenty-seven feet apart, three and a-half feet deep, and filled with tiles and broken stones. There were also thirty-five perches in length of fences removed, and about thirty perches of ground levelled and reclaimed, making in all a positive addition to the farm of 1R. 10P.

JAMES W. SMYTH, Agriculturist.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballymoney Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d
To amount paid for Rent, Taxes, &c.,	60	14	11	By amount received for Grain,	15	11	9
" " Seeds, Lime, Manure, &c.,	31	9	8	" " Roots, &c.,	28	6	10
" " Cattle during year,	53	19	0	" of Inventory and Valuation taken at close of the year,	161	6	7
" " Implements and Repairs,	29	13	2	By Proportion of Permanent Improvements,	32	10	0
" " Labour,	73	10	5	By Profit and Loss for balance,	11	12	0
	£249	7	2		£249	7	2

13. MOUNT TRENCHARD CENTRAL MODEL AGRICULTURAL SCHOOL, County Limerick.

Mount Trenchard Model Farm.

Agricultural Instruction.—Agricultural Boarders.—I have great pleasure in stating that this class was well attended during the past year; and the desire to send young men to receive agricultural training seems to increase, as there are now two applications standing over that could not be entertained, all the paying places having been previously filled up. I may, therefore, justly conclude that the benefits resulting from this school are becoming better understood by the surrounding farmers; and that as vacancies will occur from time to time, the opportunities thus afforded for having young men educated and trained in a proper system of agriculture will be promptly taken advantage of by the parents of young men who intend them to follow that profession.

Industrial Class.—This class has not been so largely attended as last year, which may be accounted for by the temporary suspension of one of the literary schools, from which its members are drafted; those who attended gave perfect satisfaction in the performance of their duties. I may also remark that the attendance of the class is not as large in winter as in summer. Owing to the severity of the former season, and the distance from the pupils' homes to the farm, regular attendance is almost impossible. However, when the spring weather commences, the attendance will again become large.

Model Farm.—The return from the farm this year is remunerative, the produce fully realizing my expectations. On account of the deficiency of last year's green crop I was necessitated to purchase a large quantity of feeding stuff, in order to keep on the usual number of stock, otherwise the profits for this year would appear much larger. As the land is now improved and fertilized I intend to sow wheat, which, I have no doubt, will be successful, and will be a new feature in the farming of this neighbourhood, where the farmers have not hitherto introduced wheat culture, on account of the combined causes of bad soil, and elevated and exposed situation.

The Live Stock are healthy and in good condition; and what is of the greatest importance, I have not had disease of any kind amongst them. Though the surrounding farmers have suffered largely for the past two years from abortions amongst their dairy cows, I have not had one case, which I entirely attribute to our system of management. As usual, the stock are allowed two hours' daily exercise; and when in the house a thorough circulation of air is insured by keeping the doors and ventilators open both day and night, by which means the constitution of the cattle becomes hardy, and any injury from sudden changes of temperature prevented.

Manures.—I have not found it necessary to purchase any extraneous manures, having a sufficient quantity of farm-yard dung for my requirements. Each day the manure from the cow-house, stable, and piggeries is removed to the general heap, which is kept consolidated to prevent too quick fermentation, and the whole turned loosely over and well separated, and mixed about seven weeks before applying it to the soil. The scutch-grass and other weeds collected on the farm I put into a separate heap, mixed with alternate layers of sea-weed; and when well decomposed use as top-dressing. I have this month heavily top-dressed about three acres with compost made in this way, from which I hope to derive much benefit.

Permanent Improvements.—I have made no permanent improvements during the past year, with the exception of forming about thirty perches of farm-road, planting thirty-four perches of thorn fence, and

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Mount Trenchard Model Farm.

removing banks of earth for the purpose of filling up hollows in the cattle paddock, and other parts of the farm, which not only looked unsightly, but also allowed the lodgment of water during winter.

Agricultural Improvement.—The progress of agricultural improvement in this district is very satisfactory, and continues gradually to extend. Improved thorough drainage, subsoiling, the cultivation and improvement of land hitherto in a state of nature, and laying down fields with suitable grass-seeds, seems to be becoming generally understood. House-feeding, according to our system, is not yet introduced; but a desire to preserve and economize solid and liquid manures is gaining ground; and I have been called on by farmers during the past year to assist in making arrangements for the purpose.

The Local Farming Society, established on Lord Monteagle's property, is of great utility, and is gaining ground each successive year; and from the association and mutual co-operation of the society and this school and model farm, I anticipate most important results.

From the knowledge I have of the feelings entertained by the people of this locality, generally, of the usefulness of this school, there can be no question but it is progressing favourably in public estimation; and I have reason to affirm further that this appreciation of its merits is not confined to this immediate locality, but is becoming gradually extended to more distant districts.

PATRICK O'CONNOR, Agriculturist.

[SUMMARY, &c.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	227	2	6
" Paid for Labour,	50	13	6
" Free Labour of Pupils,	20	0	0
" Paid for Farm Seeds,	8	11	0
" " Manures,	3	0	0
" " Cattle,	25	5	6
" " Feeding Stuffs,	24	10	6
" " Implements and Repairs,	5	5	11
" " One year's Rent of Farm,	21	0	0
" " " Poor Rate,	0	14	6
" " " County Cess,	2	1	4
To Profit and Loss for balance, being gain on the year,	40	5	10
	£428	10	7

Cr.	£	s.	d.
By amount received for Grain,	56	9	3
" " Roots, &c.,	24	9	6
" " Cattle Sold,	41	0	0
" " Dairy Produce,	44	10	7
" " Eggs and Poultry,	3	6	3
By Inventory and Valuation taken at close of the year,	258	15	0
	£428	10	7

TABLE showing the CROPPING of the Mount Trenchard Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Mangels,	1 3 0	4th May,	November,	5 lbs.,	20 tons,	8 4 0	11 16 0	—	
Turnips,	3 0 0	1st June,	November,	4 lbs.,	16 tons,	8 16 0	7 14 0	—	
Kohl Rabi,	0 0 20	21st April,	November,	4 lbs.,	16 tons,	8 16 0	7 14 0	—	
Rape,	0 1 0	April and August,	—	16 lbs.,	—	—	—	—	A correct account not kept.
Vetches,	1 3 0	20th September,	June and July,	3 bushels,	—	—	—	—	
Potatoes,	1 0 0	12th April,	October,	64 stones,	8 barrels,	6 11 0	5 9 0	—	
GRAIN.									
Oats,	10 0 0	March,	4th September,	8 stones,	110 stones,	2 15 0	2 16 0	—	
Barley,	1 0 0	April,	—	10 stones,	—	—	—	—	Not good.
GRASS.									
Italian Rye-grass & Clover,	5 2 0	14th April,	20th June,	3 bushels, 10 lbs.,	Hay 3 tons,	2 18 0	3 2 0	—	
Perennial do. do.,	1 2 0	14th April,	23rd May,	1½ bushels, 10 lbs.	Cut for soiling.	—	—	—	
Total,	25 3 20								
"STOLEN CROPS."									
Turnips, after Vetches,	1 2 0	August,	December,	4 lbs.,	6 tons,	—	—	—	No account kept.
Rape, after Vetches,	0 1 0	August,	December,	20 lbs.,	Not known,	—	—	—	Do.
Total,	1 3 0								

(Signed), PATRICK O'CONNOR, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 10, 1855.

STEPHEN E. DE VERE, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Woodstock Model Farm.

14. WOODSTOCK MODEL AGRICULTURAL NATIONAL SCHOOL, County Kilkenny.

January 5, 1855.

Agricultural Instruction.—Agricultural Boarders.—In this class there are two paying boarders since the 15th ultimo; they seem to be well inclined, and I have every reason to hope they will give general satisfaction. I expect a free boarder immediately after the Christmas holidays.

Agricultural Class.—The attendance in this class averaged twelve boys throughout the year, principally the sons of comfortable farmers. They have made satisfactory progress in literary and agricultural studies. They work on the farm from twelve to one o'clock each day, and receive agricultural instruction in the school from half-past eleven to twelve on alternate days.

Industrial Class.—This class consists of eight boys paid by the Commissioners. The attendance was much more regular during the past than it had been the previous year. They work on the farm for two hours each day (three hours on Saturday); they are careful and attentive, and promise to become useful members of society.

Model Farm Cultivation.—Green Crops.—Preparation of the soil consisted almost exclusively of spade husbandry; the stubbles had been dug up into high ridges immediately after harvest, and levelled in spring, previous to getting in the crops. Potatoes were planted in No. 1 (five-course rotation), on extremely poor soil, the surface being nearly altogether taken away for fuel by the former tenant. I purchased twenty barrels of lime, mixed it with soil from on *old ditch*, had it evenly distributed over this division, and harrowed in. I next opened drills and got out farm-yard manure, rather sparingly, in order to lessen the tendency to *disease.*

Mangels.—These were sown in a well-prepared soil, on the 5th and 6th of May. They came up very evenly; but being checked by light frosts, which occurred on the 14th, and continued at intervals up to the 3rd of June, the crop was but a poor one.

Turnips (Swedes).—The soil was prepared the same as for the mangel. The sowing commenced 29th May, and terminated 14th June, in drills about twenty-two inches apart. Though the season was not a favourable one, the produce is fair, and the bulbs much sounder than those of past years. The latest sown division in the field has been estimated at about twenty tons per statute acre. The Aberdeens grown on newly-reclaimed portions of the farm returned about the same amount of produce.

Grain Crops.—These yielded far above an average, except one division (No. 2, five-course), being the first crop, produced only six barrels to the statute acre, while the divisions which I had previously tilled yielded over eleven barrels to the acre. The wheat was superior to any in the district, both in quantity and quality. It was sown broadcast, in ridges about four feet wide, and covered up from narrow trenches or furrows with spade and shovel. I have drilled it this season with the plough, and shall let you know the result in my next report.

Clover.—This crop was only tolerable, except one division on which I had three cuttings—the last was light.

Vetches.—Ten perches supplied food to the cattle for two weeks, at four feeds per day.

The cropping, in general, has been successful; I have had no reason to complain, when I see around me land of very superior quality not returning much more than half the produce.

Live Stock.—I house-fed two cows and a yearling from 13th December to 15th April, on raw turnips and cooked food, giving two feeds of the latter morning and evening, and four of the former each day. The turnips being used, and having but three roods, *statute*, of poor pasture, I took a field convenient for occasional pasturage, and having still some hay, I kept the cattle in every night. On the 1st of June, having sent the yearling on grass, I commenced soiling the two cows with clover, vetches, and grass from the ditch at the eastern boundary, giving three feeds a-day and one at night, mixed with a little of the dry hay which I held over for that purpose. I had them turned out on the field for a few hours each day, up to the 1st October, since which I fed with mangel leaves and cabbages to 15th November, on Aberdeens to the 29th, and with cooked food, &c., to the present—same as last season.

I have reared two calves, one is now a yearling, the other since last April; these I keep on the outside field during the day, and in house at night.

Dairy.—Managed same as last season. The quantity of butter for the year, 312 lbs., exceeding the past by 205¼ lbs.; the quality was superior, realizing one half-penny per pound over *market price*, all through the season.

Pigs were not near so profitable as in previous years; the three which I kept were rather young stores when purchased, and turned out very bad feeders. The result of their feeding was to give me a home market for diseased potatoes, milk, &c., to the amount of £3. I have two good stores at present, which promise fair.

Manures.—Those used were lime and farm-yard manure; a large quantity of the latter had been made of heath and furze, kept as litter under the cattle from the 2nd February to 1st October. I also had layers alternated with earth from the old ditch, to which I applied liquid manure from the tank; the quality was good—turnips did *well* on it.

I invariably keep soil convenient to the dung-heap; and as a layer of manure is formed, a little of the soil is scattered over to prevent the escape of gases. I get the manure heap turned about a month before using.

Permanent Improvements.—These consisted in filling up and levelling the *excavated* part, clearing the portion occupied by furze, levelling an old ditch, &c. I also opened a trench about six feet wide at top, two and a-half at bottom, varying from five to three feet deep. A good deal of soil was had from it, which was replaced by a very large quantity of stones that had been previously collected from the upper and lower divisions during the past three years. It extends from the front of dwelling-house to the stream at the eastern boundary, dividing the six-course from the five-course, and serves to carry off the water from the front of the building.

Agricultural improvement is steadily progressing in this locality, among the middle class of farmers, particularly in the cultivation of green crops, the after-culture of which has been carefully attended to.

The ruinous system of taking grain crops in succession, which had been extensively practised, is beginning to be abandoned by the more intelligent farmers, who confess that the cereal crops grown here this year on soil which, but a short time since, was almost barren, surpass any thing of the kind they have ever witnessed.

In conclusion, I feel happy to have it in my power to inform you that the Woodstock Model Farm continues to attract the attention of the neighbouring farmers, and even of strangers who pass from New Ross to Kilkenny, &c. A comparison of its present improved state with what it had been when I commenced operations, clearly shows what profitable investment is the reclamation and judicious management of land.

JOHN LYNCH, Teacher and Agriculturist.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Woodstock Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	76	0	4
,, Paid for Labour,	17	6	11
,, Free Labour of Pupils,	4	4	7½
,, Paid for Farm Seeds,	0	18	0
,, ,, Manures,	0	19	3
,, ,, Cattle,	3	10	0
,, ,, Feeding Stuffs,	4	9	11½
,, ,, Implements and Repairs,	0	17	1½
,, ,, One year's Rent of Farm,	8	14	0
,, ,, ,, Poor Rate,	0	11	3
,, ,, ,, County Cess,	0	5	0
To Profit and Loss for balance, being gain on the year,	20	16	10
	£138	13	3½

Cr.	£	s.	d.
By amount received for Grain,	10	1	5
,, ,, Roots, &c.,	15	18	10
,, ,, Cattle Sold,	18	0	0
,, ,, Dairy Produce,	18	16	7½
,, ,, Eggs and Poultry,	2	8	11
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	73	7	6
	£138	13	3½

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Woodstock Model Farm.

TABLE showing the CROPPING of the Woodstock Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes, . . .	1 1 9	Feb., March, April,	October, . .	80 stones, .	369 stones, .	9 14 1	—	0 9 7	About one-third seed failed, caused by drought.
Swede turnips, . .	0 2 25	May, June, . .	December, January,	4 lbs., . .	16 tons, . .	8 14 11	2 13 8	—	
Aberdeen turnips, . .	0 0 20	June, . . .	November, December,	4 lbs., . .	20 tons, . .	8 14 0	1 6 0	—	
Mangels, ...	0 1 35	May 5, &c., . .	November, . .	6 lbs., . .	10 tons, 13 cwt.,	8 13 3	—	0 13 3	Checked by frost immediately after appearing above ground, and continued delicate all through the season.
GRAIN.									
Wheat, ...	0 1 20	December, 1853, .	August, September,	10 stones, .	5½ barrels, .	3 9 8	8 15 8	—	
Oats, ...	2 3 16	March, . . .	August, September,	12 stones, .	9⅜ barrels, .	3 0 0	4 14 4	—	
Vetches, ...	0 0 10	—	June, . . .	10 st. & 4 st. oats,	12 tons, . .	6 3 4	1 16 8	—	The cost of cultivation is high in consequence of being manured and sown in reclaimed portion.
GRASS.									
Hay and Soiling, . .	1 0 30	March, . . .	June, July, August,	10 lbs. Red Clover, 1½ bushel mixed Grass seeds,	1 ton, 7 cwt., .	2 4 2½	1 5 3	—	
Pasture, ...	0 3 5	—	—	—	—	—	—	—	
Garden vegetables, . .	0 1 38	Different periods, .	—	—	—	8 18 1½	9 18 3	—	
Total, . .	8 1 8								

(Signed), JOHN LYNCH, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief,

5th January, 1855.

W. F. TIGHE, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Larne Model Farm.

15. LARNE MODEL AGRICULTURAL NATIONAL SCHOOL, County Antrim.

January, 1855.

Agricultural Instruction.—There were three agricultural boarders educated at the establishment during the year. Several applications were received for the admission of others, but they could not be complied with, as it was considered the allowance, £12 10*s.* a-year, for board, lodging, washing, and tuition, was not sufficient to cover the expenses.

During the year one of the pupils was appointed to a National School; one was taken to the Special Class in Dublin; six were apprenticed as sailors; one was appointed assistant, and one paid-monitor, in the establishment; and one is about to be summoned to the Albert Institution.

The following shows the destination of the advanced boys who left the establishment since 1848, the date of my appointment as Head-Master:—

12 were taken to Glasnevin Model Farm.
14 were appointed as Teachers of National Schools.
6 became clerks.
26 went to sea.
23 entered shops and trades.
4 went to College.
9 emigrated to America.
2 are for sea at 1st of March.
1 is about to be taken to the Albert Institution.

Of the pupils remaining in establishment at the present time—

16 are learning book-keeping.
15 ,, mensuration.
15 ,, geometry.
8 ,, trigonometry.
5 ,, navigation.
3 ,, algebra.
40 ,, agriculture.

The system pursued in imparting instruction on agriculture and the sciences connected therewith, is pretty fully described in my last Report to the Commissioners; it is not therefore necessary to detail it at present.

The Industrial Class.—This class has been in operation for the last six years, and during this period has worked most satisfactorily. I have paid special attention to these boys in the schoolroom, have taken part in their amusements during the hours of relaxation, and worked with them in the evenings on the Model Farm, and the results I have observed are—"steady and industrious conduct on the farm; considerable taste and dexterity in performing light work; constant and regular attendance at school; and, in consequence, superior proficiency in agricultural and literary studies." It is much to be regretted that industrial classes are not more numerous under the Board of Education, especially when it is remembered that at least seven-tenths of the pupils attending our National Schools will have to depend on agriculture for a livelihood during life.

The Agricultural Class.—This class is made up of two divisions. The first division is composed of the most advanced boys attending the school, who are instructed in agricultural subjects generally. The second division contains the junior classes, who are able to read easy lessons on agriculture. I find it very profitable to these classes to

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substitute agricultural lessons occasionally for the ordinary ones. The only drawback arises from the want of a text-book on agriculture, suited to the capacities of young children.

Model Farm.—There was no change of any moment made in the management of the Model Farm during the year. The different crops were cultivated in the usual way, and with as much care and skill as we could command. The cattle were kept in the house, as usual, and got six feeds daily; they had vetches and rape in spring, grass and clover in summer, early turnips, cabbages and aftergrass in autumn, and turnips, cabbages, mangel, &c. in winter. Two calves were reared during the year. A casualty occurred among the stock, by a heifer being choked before assistance could be rendered, which seriously diminishes the profits.

The manure heap was carefully attended to, and its judicious application to the crops occupied a due share of attention.

Crops.—The wheat crop turned out very badly. It was most luxuriant and promising till the time of flowering, when it became so seriously affected by rust, that the yield was not more than one-half of what might have been expected from the appearance of the crop. This serious loss must be attributed to the wetness of the season at that period, *and the over richness of the soil.*

In November we transplanted turnips and mangel for seed. They grew quite successfully. The turnip seed was ripe in August, the mangel seed in the beginning of November. The birds were very destructive on the turnip seed.

There is another feature in the establishment to which I would beg leave to direct attention, although it may be somewhat out of place here, viz., a navigation class. This class has been in operation here since 1848. During this period, twenty-six boys have gone to sea; six went off during the past year; two are for leaving 1st March. These boys are bound four years, and are to receive—

For the 1st year, ...	£4	0	0
,, 2nd ,, ...	5	0	0
,, 3rd ,, ...	6	0	0
,, 4th ,, ...	9	0	0
In all, . . .	£24	0	0

In the beginning of the year the Commissioners were pleased to make a grant to the school of the following requisites:—one Hadley's sextant; one Azimuth compass; one nautical almanac; two copies Norie's Navigation.

In addition to these were purchased a box of mathematical instruments, a set of chemical apparatus, a globe, thermometer, and microscope. The microscope is very useful to show the structure and organization of flowers, the animalculæ in water, the peculiarities of insect forms, &c., &c. No school should be without one. A considerable addition was also made to the geological collection, and a number of paintings and diagrams were put up, illustrative of important scientific principles.

I find it quite practicable to teach navigation to a class of boys during school hours, without any undue interference with the ordinary business of the school. The principles of plain sailing, traverse sailing, parallel sailing, &c., &c., are easily explained to pupils; and the examples in each case being nearly similar, it does not require much attention on the part of the teacher to enable pupils to work the exercises.

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In most of our National Schools the advanced classes are instructed in the following subjects :—"mathematical geography; principles of astronomy, parallax, refraction, dip of horizon; methods of finding latitude by observation, longitude by observation, and by chronometers; the nature of winds, tides, and currents; and right-angled and oblique trigonometry." A knowledge of these subjects is indispensable to the nautical student. It is plain, therefore, that the education afforded in our National Schools is a good introduction to the study of navigation.

James Macdonnell.

[Summary, &c.

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Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year, ...	74	6	0	By amount received for Grain, . . .	44	8	5
" Paid for Labour, ...	22	0	3	" " Roots, &c., ...	12	10	0
" Free Labour of Pupils, ...	5	0	0	" " Cattle Sold, . . .	21	6	2
" Paid for Farm Seeds, ...	5	16	3½	" " Dairy Produce, . . .	21	0	9
" " Manures, ...	0	5	0	" " Eggs and Poultry, . . .	1	10	0
" " Cattle, ...	23	17	6	By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements, ...	82	1	0
" " Feeding Stuffs, . . .	10	6	10				
" " Implements and Repairs, . .	1	1	0				
" " One year's Rent of Farm, . . .	18	15	0				
" " " Poor Rate, . .	1	7	0				
" " " County Cess, . .	2	10	0				
To Profit and Loss for balance, being gain on the year, .	17	11	5½				
	£182	16	4		£182	16	4

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TABLE showing the CROPPING of the Larne Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.			
GREEN FALLOW CROPS.									
Potatoes, ...	0 1 35	March, ...	—	13 cwts., .	8 tons, . .	16 0 0	Profit.		
Turnips, ...	0 1 35	May, ...	—	4 lbs., . .	16 tons, . .	13 0 0	Do.		
Mangels, ...	0 1 35	April, ...	—	4 lbs., . .	18 tons, . .	14 0 0	Do.		
				—					
GRAIN.									
Wheat, ...	3 3 16	November, . .	September, . .	14 stones, .	17½ cwts., .	10 0 0	Do.	—	The wheat crop was very seriously affected by rust.
Oats, ...	0 1 0	March, . .	September, . .	2 cwts., . .	20 cwts., .	8 0 0	Do.		
Flax, ...	0 0 16	March, . .	July, . . .	3½ bushels, .	42 stones, .	10 0 0	Do.		
GRASS.									
Grass, ...	1 1 24	April, . . .	June, . . .	3 bushels, .	27 tons, two cuttings,	—	Do.		
Total, . .	7 0 1								
"STOLEN CROPS."									
Rape, ...	0 2 0	Autumn, . .	—	—	—	—	Do.		
Vetches, . . .	0 3 0	Autumn, . .	—	—	22 tons, . .	—	Do.		
Cabbage plants, . .	0 1 0	July, . . .	—	—	—	12 0 0	Do.		
Total, . .	1 2 0								

(Signed), JAMES MACDONNELL, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

March 8, 1855.

CHARLES WARD, Manager.

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Markethill Model Farm.

16. MARKETHILL MODEL AGRICULTURAL NATIONAL SCHOOL, County Armagh.

January 3, 1855.

Agricultural Instruction.—Agricultural Boarders.—The applications for admission to this class have been more numerous during the past year than formerly. There are four, at present, in the class—two from Dublin, one from the county of Down, and one from this neighbourhood. They receive literary instruction in the literary school during the usual school hours; and from six to eight o'clock in the evenings is devoted to agricultural study and instruction. They are employed during the other portions of the day in receiving practical instruction in agriculture, by the performance of such operations on the farm and in the farm-yard as are suited to their respective capacities. I have had reason to be well satisfied with their general conduct and attention to both in-door and out-door instructions, and they have made a fair progress in these departments during the past year.

Agricultural Class.—This class is composed of the more advanced boys attending the day school, who receive agricultural instruction half an hour each day, Saturday excepted. The progress made with the members of this class is not quite satisfactory, owing to their irregular attendance. This evil I have succeeded in counteracting to some extent, by distributing agricultural periodicals and papers as premiums for regular attendance and proficiency. I have also succeeded in procuring specimens of most of the various minerals, rocks, salts, and grasses; and from the interest that this collection will likely excite in the minds of the pupils, I anticipate greater success in imparting agricultural instruction in future. I have long been of opinion, that until we can exhibit to our pupils specimens of the various agricultural materials treated of, they will not feel much interest in acquiring such knowledge, nor will their impressions of the subject be so lasting.

Industrial Class.—I regret to have to state that the members of this class neglected occasionally, during the past year, to comply with the ordinary rules, and in consequence I was unable, latterly, to obtain the usual quarterly fees for them. Their non-attendance arose from the following causes:—Some of its most advanced members withdrew because we did not succeed in obtaining admission for them on the Albert Model Farm; and also the demand for labour being so urgent in this locality, the majority of the pupils, when capable of affording any assistance in this respect, were commonly withdrawn from their attendance at school—especially during the hurried seasons of the year.

Model Farm.—In the "balance sheet" accompanying this Report it will be seen that the profits on the year's transactions (£28 4*s.* 8*d.*) is less than usual in consequence of the death of a milch cow (value, £10), from pleurapneumonia; and the deficiency in the returns from the wheat and bean crops, the wheat having returned less than an average yield, owing to the very wet and unfavourable season during the period of flowering; and the beans being considerably injured, a little after sowing, by the ravages of vermin. Casualties of this description occasionally fall to the lot of the most intelligent and industrious agriculturists.

Experiments instituted during the year.—Being anxious to carry out experiments with the various sorts of portable manures now in the market, in order to test their real practical value, under different circumstances, I had various trials instituted during the past year, with different crops, the results of which I now beg leave to submit. For the sake of reference I shall state the order of the rotation in which these experiments took place:—No. 1, green crops; No. 2, oats with grass seeds; No. 3, grass cutting; No. 4, grass second year; No. 5, oats on lea; No. 6, flax.

Experiment, No. 1.—This trial was carried out for the purpose of ascertaining what effect saline manures would have as a preventive against disease. As will be seen, the return from the saline application is not so large as that from the farm-yard manure alone, yet the per centage of diseased tubers is considerably less, which is so far satisfactory.

Experiment, No. 2.—It will be seen by a reference to the table that the largest return from any of the manures used is that from guano alone—a proof that, when genuine, it is the best application the farmer can use as an auxiliary for the growth of green crops. The next in the order of increased production is that from farm-yard manure in conjunction with concentrated blood manure. The latter was furnished to me by direction of Lord Gosford, and I am at present unable to state the actual price at which it is sold in the market; but, in this instance, I have assumed the cost, including carriage, to be 12*s.* per cwt. Several circumstances prevented me carrying out the trials with the mangel wurzel to the extent I had originally intended.

Experiment, No. 3.—The principal feature observable in this experiment is the greater increase from the saline application on the Tartarian oats than on the potato oats. This result I attribute, principally, to the circumstance, that the portion of the field on which the Tartarian oats were sown was in a lower state of fertility than that on which the potato oats grew.

Experiment, No. 4.—The manure used as a top-dressing for the flax in this experiment was that recommended by Doctor Hodges, and manufactured by the Messrs. Ritchie, Belfast. It will be seen by a reference to the table that the increase of dressed fibre from the manure used would not do more than pay the cost of application; but in order to give the experiment a fair trial, I think three cwt. per acre should have been applied instead of two.

Live Stock and Dairy Management.—As the principal source of profit in connexion with the farm has arisen from the keep of dairy stock, I have been induced, from time to time, to adopt every available means of improvement that suggested itself to me in this department of management. House-feeding throughout the year is the system principally followed; and as I furnished in my last Report a detailed statement of my practice in this respect, I deem it unnecessary, at present, to detain you by any reference to it, as the same mode of management is continued with equally beneficial results. As an instance, however, arising from attention to the selection and mode of house-feeding dairy stock, I may state that the receipts for sale of dairy produce from four milch cows, during the past year, amounts to £35 13*s.* 6*d.*, besides rearing three calves, and supplying the family with milk and butter. I may also mention that the extra feeding stuffs, purchased during the year, amounted to only £2 8*s.*

Manures.—Since the site of the manure pit has been changed to a more central position of the farm steading, a greater facility has been obtained in accumulating and preserving the manure; and from the house-feeding of the farm stock, a large quantity is yearly collected. The only desirable improvement to be effected in its present position is the fitting up of eave-spouting along the rear of the offices adjoining. The manure is made up in alternate layers with peat-mould, road scrapings, and other rubbish collected over the farm. It is occasion-

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ally watered, especially during the summer months, with liquid from the tanks. A portion is ploughed in on the field intended for green crops in the autumn season and during the winter months; the remaining portion is carted out to the headlands of the fields intended for its use, and there covered with friable earths, to prevent the escape of the volatile parts during the process of fermentation. I intend to institute various experiments this year with liquid manure, on grass and other crops, and I shall feel pleasure in forwarding the results in my next report.

Permanent Improvements.—There have been no permanent improvements effected on this farm during the past year, the greater portion of these works being already completed.

Local Agricultural Improvements.—Agricultural improvement is steadily advancing in this neighbourhood; but whether to attribute this progress to the increased market value of dairy and farm produce, &c., or to the example afforded on this farm, it is not for me to say. There is one fact, however, quite evident, viz.:—that the farmers in the rural districts can be more readily stimulated to improvements in their profession by practical example than by the aid of agricultural lectures and crude theories, as the great majority of this class care very little for such instruction when not borne out by practical results.

PATRICK O'HAGAN, Agricultural Teacher.

EXPERIMENT, No. 1.—Potatoes in No. 1 field.

Manures applied per statute acre.	Cost of Manures.	When planted.	Return of Produce per acre.	Distance of Drills apart.	When tested.	Per centage diseased.
	£ s. d.		tons. cwt. qrs.	Inches.		
10 Tons farm-yard manure, 2½ cwt. nitrate of soda, . .	2 15 0	1st week in April,	7 5 2	30	Oct. 18,	5
20 Tons farm-yard manure, .	3 0 0	Ditto,	9 14 1	30	Ditto,	33

EXPERIMENT, No. 2.—Green Crops in No. 1 field.

Description of Crop.	Manures applied per acre.	Cost of Manures.	When sown.	Returns of Produce per acre.	When tested.	Distance of Drills apart.	Distance of plants.
MANGELS.		£ s. d.		tons. cwt. qrs.		Inches.	Inches.
Yellow globe, .	28 tons farm-yard manure, 3 cwt. of salt,	4 4 0	May 5,	24 0 0	Nov. 23,	27	12
Ditto, .	14 tons farm-yard manure, 2½ cwt. of bone compound,	2 19 6	May 5,	20 13 0	Ditto,	27	12
TURNIPS.							
Yellow bullock,	13 tons farm-yard manure, 3½ cwt. of guano,	4 1 0	June 2,	27 1 2	Ditto,	26	10
Ditto, .	7 cwt. of guano,	4 4 0	June 2,	31 11 3	Ditto,	26	10
Ditto, .	16 tons farm-yard manure, 3 cwt. of concentrated blood manure, from the London companies,	4 4 0	June 17,	29 3 1	Ditto,	26	10
Swedes, . .	26 tons farm-yard manure,	3 18 0	June 8,	25 10 1	Ditto,	26	10

EXPERIMENT, No 3.—Oats in No. 5 field.

Description of Crop.	When sown.	Manures applied per acre.	When applied.	Cost of Manures.			Acreable Returns of Produce.						When tested.
							Grain.			Straw.			
				£	s.	d.	cwt.	qrs.	lbs.	cwt.	qrs.	lbs.	
Black Tartarian Oats,	April 6,	Sulphate ammonia, 1¼ cwt.,	April 7,	1	0	0	27	0	0	37	3	7	30th Sept.
Ditto,	April 6,	No manure,	—		—		21	2	12	29	2	23	Ditto.
Potato Oats,	March 30,	Nitrate of soda, 1¼ cwt.,	April 7,	0	12	6	29	2	23	59	1	18	Ditto.
Ditto,	Ditto,	No manure,	—		—		28	1	12	62	1	11	Ditto.
Ditto,	Ditto,	Sulphate of ammonia, 1¼ cwt.	April 7,	1	0	0	29	2	0	63	1	22	Ditto.
Ditto,	Ditto,	No manure,	—		—		27	1	0	55	1	18	Ditto.

EXPERIMENT, No. 4.—Flax in No. 6 field.

Description of Seed.	When sown.	Manure applied per acre.	When applied.	Cost of Manure.			Return of dressed Fibre per acre.
				£	s.	d.	
Riga Seed,	April 13,	2 cwt. of flax manure,	April 13,	1	0	0	36 stones.
Ditto,	Ditto,	No manure,	—		—		34 stones.

[SUMMARY, &c.

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Markethill Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of Year,	217	4	11
„ Paid for Labour,	22	13	11½
„ Free Labour of Pupils,	1	3	8
„ Paid for Farm Seeds,	12	4	8½
„ „ Manures,	9	16	0
„ „ Cattle,	33	11	11
„ „ Feeding Stuffs,	2	7	11½
„ „ Implements and Repairs,	5	9	8
„ „ One year's Rent of Farm,	33	6	4
„ „ „ Poor Rate,	0	13	4½
„ „ „ County Cess,	1	16	0
To Profit and Loss for balance, being gain on the year,	27	14	7
	£368	3	1

Cr.	£	s.	d.
By amount received for Grain,	17	13	4
„ „ Roots, &c.,	3	1	6
„ „ Cattle Sold,	60	7	10
„ „ Dairy Produce,	35	13	6½
„ „ Eggs and Poultry,	1	15	8½
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	220	11	2
By Farm, Garden, and Dairy produce used by Family,	29	0	0
	£368	3	1

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Markethill Model Farm.

TABLE showing the CROPPING of the Markethill Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Mangels, ...	0 2 0	1st week May, .	4th week November,	6½ lbs., . .	20 tons, 13 cwt.,	8 7 0	7 12 0	—	
Turnips, ...	1 0 20	1st, 2nd, and 3rd weeks June,	Yet in field, . .	5 lbs., . .	27 tons, 6 cwt.,	7 13 0	6 0 0	—	
Beans, ...	1 1 12	1st week March, .	2nd week October, .	2½ bushels, .	38 bushels, .	6 13 0	0 19 0	—	The Bean seeds much injured at the time of germination by vermin.
Potatoes, ...	0 3 0	1st & 2nd wks. April,	4th week October, .	11½ cwt., . .	7 tons 5 cwt., .	9 8 0	5 2 0	—	
GRAIN.									
Wheat, ...	1 1 0	November, 1853, .	2nd week September,	11 stones, . .	17 cwt., . .	5 6 0	4 18 0	—	The wheat was injured considerably at the period of flowering, owing to the very wet season.
Oats, ...	4 1 0	3rd & 4th wks. March,	3rd & 4th weeks Sep.,	10 stones, . .	1 ton, 8 cwt., 1 qr.	4 1 0	7 5 0	—	
Flax, ...	1 2 0	2nd week April, .	2nd week August, .	2½ bushel, .	35 stone, . .	6 12 0	5 13 0	—	
GRASS.									
Grass, ...	6 0 0	—	3rd week July,	3 bushels and ¾ stone of clover seeds,	2½ tons, average,	3 14 0	2 11 0	—	The return of hay given here is below the average. A portion top-dressed with liquid manure during the season yielded 19¼ tons, from three cuttings, whilst the portion undressed did not yield more than 6 tons of grass; when in flower.
Total, . . .	16 2 32								
"STOLEN CROPS."									
Vetches, ...	0 1 36	2nd week Oct. 1853,	Used during the month of May for soiling,	3½ bushels and 2 stones of rye, .	15 tons, . .	Included in last year's returns.		—	

(Signed), PATRICK O'HAGAN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 3, 1855. JOSEPH M'KEE, Manager.

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Carrick Model Farm.

17. CARRICK MODEL AGRICULTURAL SCHOOL, County Fermanagh.

January 12th, 1855.

Agricultural Instruction.—The agricultural class averaged about sixteen; though this is less than the number last year, yet it may not appear strange since there is such a decrease of agricultural labourers in this district. The larger boys are employed at home, and the majority attending the school are below the years suitable for receiving agricultural instruction; but of those attending the lectures, I have every reason to feel gratified with their attention and proficiency.

Neither an agricultural boarders', nor an industrial class has as yet been formed here, but I hope these defects, which have so long retarded our progress, will soon be remedied.

During the summer months I paid two boys sixpence a-week for working two hours each day; they evinced the greatest diligence and taste at every operation, and were unwilling to discontinue until compelled by their parents to aid them in their harvest operations.

Model Farm.—The farm has recently been increased to thirty statute acres. This lately acquired portion is detached, though within view of the original farm. It has a south-eastern aspect, the surface soil resting on a subsoil of limestone gravel. I considered it advisable to lay it down with grasses adapted for the pasturage of sheep. I shall, therefore, be able to test which of the two systems is the more remunerative.

Permanent Improvements effected during the year.—These consisted in levelling all the useless and interior fences, which could not be effected last year, filling and levelling gripes, trenching a portion of the garden, and constructing a farm-road.

After the labour of putting in the crops had terminated, the manager (Rev. J. G. Porter) deemed it advisable to enlarge the offices, as it was considered they were too small to accommodate the stock necessary to be kept on the increased extent of the farm. He accordingly, at his own expense, commenced the erection of a cow-house capable of containing twelve dairy cows, but it is not yet finished.

Experiments.—As my attention was so much occupied with the improvement of the farm, and the erection of the new farm buildings, I was prevented from devoting as much attention to these matters as I would wish. However, I was enabled to note some leading facts, which it may be useful to set forth. I sowed the greater part of the new farm with oats, and as a portion of it was very much exhausted from continued cropping, I was compelled to top-dress it with a mixture of Peruvian guano and peat ashes, at the rate of two cwt. guano to the statute acre: I applied the manure before the last turn of the harrows. In order to see the effects of the guano on the future crop, I left a portion of a ridge in the centre of the field unmanured; and, what was very remarkable, the crop that was manured was in the stack-yard, when the other portion was reaping.

The importance of this fact to those who are forced to sow white crops on exhausted land is obvious; as by the application of a little guano they will insure themselves a harvest two weeks earlier, which is a great desideratum in our moist climate. I tried mixed cropping with beans and potatoes, by alternating beans with the potato sets. This experiment succeeded well. I also grew cabbages and mangel, and carrots and cabbages, together; the cabbages were taken in both plots as a stolen crop. I prepared the plots early in October, formed them into drills, applied at the rate of thirty tons farm-yard manure to the acre, and planted the cabbages at the usual distances in the spaces

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I watered them frequently during the winter months with liquid manure. At the latter end of April I sowed the mangel on the crown of the drills; but before sowing the seed, I gave it a half-manuring of guano mixed with ashes. The cabbages grew most luxuriantly, and were fit for cutting early in May. The mangel plants came on well at first, until the leaves of the cabbages over-shadowed the drills, and by excluding the air, the mangel plants were blanched, from which some of them never recovered, and I had to transplant the greater portion of that plot.

The same experiment with the carrots succeeded well; they did not seem to be injured by the cabbages, though both were growing together for a length of time.

In conclusion, I would earnestly suggest the formation of the agricultural "boarders'" and the "industrial" classes; also the appointment of a separate literary teacher, which would promote the welfare and increase the usefulness of this institution.

JOHN JAMIESON, Agricultural Teacher.

[SUMMARY, &c.

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Carrick Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	212	12	7
" Paid for Labour,	22	5	1
" Free Labour of Pupils,	3	10	0
" Paid for Farm Seeds,	1	9	5
" " Manures,			
" " Cattle,	7	6	0
" " Feeding Stuffs,		—	
" " Implements and Repairs,	4	5	0½
" " One year's Rent of Farm,	30	0	6
" " " Poor Rate,	1	7	0½
" " " County Cess,	1	16	4½
To Profit and Loss for balance, being gain on the year,	40	12	4
	£325	4	4½

Cr.

	£	s.	d.
By amount received for Grain,	23	3	3
" " Roots, &c.,	10	11	3
" " Cattle Sold,	11	18	3
" " Dairy Produce,	20	15	11½
" " Eggs and Poultry,	4	5	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	254	10	8
	£325	4	4½

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TABLE showing the CROPPING of the Carrick Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes,	2 0 0	Last week in Mar., and 1st in April,	Last week in Oct.,	40 stones,	12 barrels,	3 13 4	5 9 6¼	—	
Turnips,	3 0 0	10th May to 20th June,	Winter,	4 lbs. to 6 lbs.,	16 tons,	4 4 0	5 18 10⅓	—	
Mangels,	0 1 0	1st week in May,	1st week in Nov.,	6 lbs.,	26 tns. 1 cwt. 1qr.	6 10 0	17 11 2½	—	
Carrots,	0 0 10	Last week in March,	2nd week in Nov.,	6 lbs.,	5 tns. 9 cwt. 1 qr. 14 lbs.,	6 10 0	20 7 10⅓	—	
Cabbages,	0 1 0	At various times,	Various,	9,000 plants,	Not calculated,	6 10 0	5 7 10½	—	
Beans,	0 0 20	2nd week in March,	2nd week in Sept.,	2 bushels,	24 barrels,	6 10 0	11 17 10¼	—	
GRAIN.									
Oats,	15 0 0	Last week in March,	September,	14 stones,	86 stns. average,	2 0 0	1 3 0½	—	
GRASS.									
Grass for soiling,	5 0 0	—	2nd week in May,	10 lbs. red clover, 3 bush. rye-grass,	7 tons, 10 cwt.,	2 5 0	—	0 7 1½	
Pasture,	4 1 10	—	—	—	—	—	—	—	
Total,	30 0 0								
"STOLEN CROPS."									
Winter Vetches,	0 2 0	September, 1853,	May and June, 1854,	8 stns. of vetches, 4 stones of rye,	Not weighed.	—	—	—	
Cabbages,	0 1 0	1st week in Dec., 1853,	Cut 1st and 2nd week May.	—	—	—	—	—	
Rape,	0 1 0	1st week in Sept.,	Last week of April.	—	—	—	—	—	
Beans,	0 0 20	—	—	—	—	—	—	—	
Total,	1 0 20								

(Signed), JOHN JAMIESON, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief,

J. G. PORTER, Manager.

January 5, 1855.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Loughash Model Farm.

18. LOUGHASH MODEL AGRICULTURAL NATIONAL SCHOOL, Co. Tyrone.

January, 1855.

Agricultural Instruction.—The following is the attendance of agricultural pupils during the year ended 31st December, 1854 :—

	Agricultural Boarding Pupils.	Day Pupils.	Total.
In attendance on 1st January, 1854, ...	14	18	32
Admitted during the year, ...	9	8	17
Total,	23	26	49
Left from 1st January, 1854, to 1st Jan., 1855,	8	12	20
Still at school, ...	15	14	29

Of the eight boarding pupils who left during the year, one became teacher of a National School in this neighbourhood; one assistant land steward; two left to receive a classical education; one was summoned to Glasnevin; and three returned home. The pupils, with slight exception, paid great attention to their literary and agricultural studies, and made considerable progress in acquiring a knowledge of those branches of education calculated to insure success in their intended profession, whilst the industrial habits acquired in attending to the various operations of the farm, cannot but infuse an energetic spirit which will enable them hereafter to apply successfully the knowledge and practical skill thus obtained, in the most beneficial manner for their own and their country's welfare.

Farm Management.—The result of this year's crop has been on the whole satisfactory; the yield of oats both in grain and straw, was beyond an average, succeeding equally well upon all parts of the farm. I have departed for the last three years from the ordinary course of early ploughing the clover lea intended for oats. This deviation was suggested by observing the headlands of the fields, which were later ploughed than the rest, comparatively free from the attacks of the grub; whilst the early ploughed ground in many instances had suffered severely from its ravages. This grub, which consumes the young soft braird of oats in the spring, is the larva of the crane fly; it drops its eggs in the months of September and October, at the roots of the succulent grass growing on the richest part of the field; during the winter they become the caterpillar or grub, and in the spring, while in this state, they consume whatever green herbage comes in their way, till they assume the state of chrysalis, during the months of July and August, when the perfect fly comes forth. I have strong grounds for assuming, that if the land is left unploughed till after the winter frost, it destroys many of these grub before they have sufficient strength to escape, by penetrating into the earth; whilst those that are left will feed upon the sward of the newly turned over furrows, without rising to attack the oats; but when the land is early ploughed, the sward becomes rotted, the whole of the grub are turned down out of the reach of the frost, and from having nothing to feed upon, they rise to the surface and destroy the corn. I have, for the above reasons, for the last three years, delayed the ploughing of lea till the spring, and found it fully to answer my expectations. Whether similar results, as regards the ploughing of lea at this late season, may be obtained in future years, is an experiment well worthy of trial in different localities; and should these results continue to be borne out in successive trials, it will become of great advantage in securing the oat crop from destruction, on this description of land.

The blight upon the potato set in at a much earlier period in this locality than last year; and from the late and wet spring which we had they attained but little size before the stems were cut off. The crop is consequently a very deficient one; but since the first year of the disease, I only plant potatoes upon rough land, not fit for producing any other crop. I put them in ridges, and plant cabbages in the brows, at about four feet distance: these continue to grow but slowly till the blight destroys the potato stalks, when they spread over the ridges, producing a most abundant crop. I planted in this way in April last 6,000 plants over three acres of potatoes, applying a little guano to each plant. I fed twelve cows upon the produce for two months, and it would have taken a good acre of turnips to have fed them the same time.

From the constant wet in the beginning of the year, the turnip crop suffered a good deal; however, they turned out much better than I expected, while they and the cabbages will afford us sufficient green food till the grass is fit for cutting in the summer.

Live Stock.—The management of stock occupies a considerable share of our attention, the profits resulting therefrom forming an important item in the farm accounts. It will be seen that the receipts under this head amount to nearly £200, as I have sold £128 worth of stock, with over £68 worth of dairy produce, being a considerable amount from the extent of land which I hold. The system of house-feeding has been detailed in my former reports, and need not be reported here. I have fed ten milch cows, four heifers, and reared ten calves of different ages, besides from eight to twelve pigs, ten sheep, and two horses.

Manures.—I continue to keep up a sufficient supply of manure by following the improved practice detailed in my former reports. I have invariably found that removing farm-yard manure in the winter, long before it is applied to the land, has a great tendency to reduce both the quantity and quality. It is opened up to the atmospheric air which brings on decomposition, by which it loses many of its valuable gases, leaving the manure wanting many of the elements which it would have retained, had decomposition been prevented. In consequence of this, I allow the manure to remain in the pit, packing it as close as possible, and if in the yard allowing the cattle to tread on it: this excludes the air, prevents decomposition, and consequently preserves the manure in a richer state. The manure, also, will suffice for a greater extent of ground; and its effects on the crop are strikingly exemplified, in comparison with manure applied after having gone through all its stages of decomposition. I always use, in addition to the manure, about two cwt. of Peruvian guano to the acre; this small quantity, even with less manure, will raise a greater crop of turnips than by using a most liberal supply of farm-yard manure.

Permanent Improvements.—Our spare time last year was spent in clearing land of stones, in making fences, draining half an acre, and making drains in some parts of the farm between those already made, where it was found the land was not sufficiently dry. I find on steep land that drains do not as effectively dry it when placed at twenty-one or thirty feet apart, as on level land of the same degree of tenacity. I have frequently drained fields one part of which was steep sloping ground, and the rest flat. I found some years after the level land to be quite dry, while I had to make drains between those on the slope; and I now find it necessary on this farm to place the drains closer on sloping than on level land, so as to drain it effectually.

Progress of Improvement.—The industrial status of the people in this district is still improving: from their energy, economic habits, improved mode of cultivation, and with the favourable prices now obtained for farm produce, the social condition of the people has been very much ameliorated within the last few years.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Loughash Model Farm.

The profits of the farm show a fair return for this kind of land, and a slight increase upon last year, which would have been greater had the potato crop turned out as favourable as that of the preceding year. The increased yield of oats barely covered the loss upon the potato crop. The labour this year cost considerably more from my clearing a field of rocks, draining a portion of it, ditching and levelling some old fences. I might have entered at least £16 of this in the inventory as unexhausted improvements; but as it would be brought to the debit of the farm next year, I thought it as well to debit the farm for the whole of it at once.

The accounts and other returns, herewith sent, have been accurately kept, and fairly made out, so as to represent a true state of the transactions of the year upon this farm.

In conducting the agricultural boarding department these years past, I have experienced considerable difficulty in maintaining the pupils at the small charge of £7 10*s.* per annum for boarding, washing, bedclothes, light, and all other incidental expenses; every species of outlay towards their support is now greater than when this rate was established, so that I have been for some years at considerable loss in keeping up this department of the school. I have still greater difficulty in conducting the literary department. Though I have the nominal assistance of a literary teacher, his services are comparatively trifling, from the short time that any properly qualified person remains. The additional duties required of him in attending the Agricultural Class in the morning and evening, induces him to leave so soon as a chance offers, where his duties may be less, while his emoluments remain the same; the consequence is, that this school for the last sixteen years has been chiefly in the hands of "probationers," who have themselves to become pupils under me, in order to qualify for teaching those branches studied by the agricultural boarders; from this cause the duties of the agriculturist in maintaining the literary and agricultural department of the school, are beyond what is consistent with the due performance of either. I have no doubt it would greatly add to the usefulness of this school, if a salary of £10 a-year was granted to the Literary Teacher in addition to his ordinary class salary. This would be an inducement for him to remain, and compensate him for the additional time occupied in teaching the boarders in the mornings and evenings.

JAMES MOORE, Agriculturist.

[NAMES OF PUPILS.

NAMES of PUPILS in training at the LOUGHASH AGRICULTURAL SCHOOL, for the year 1854.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Loughash Model Farm.

Names of pupils.	Date of entrance.	Destination.	Date of leaving.
1. Thomas Thompson,	October, 1851,	Glasnevin,	August, 1854.
2. John Donovan, .	June, 1849,	Still at school.	
3. John O'Neill, .	December, 1850,	Teaching school,	February, 1854.
4. Wm. M'Glinchy,	January, 1852,	Went to learn classics,	March, 1854.
5. James Brison, .	January, 1852,	Assistant Land-steward on his father's farm,	March, 1854.
6. John Smyth, .	October, 1851,	Still at school.	
7. Lawrence Clarke,	October, 1852,	Still at school.	
8. George Gallen, .	April, 1852,	Went to learn classics,	Sept., 1854.
9. George Ansel, .	October, 1851,	Went home,	March, 1854.
10. Michael M'Mahon,	April, 1852,	Still at school.	
11. Edmond Malone, .	February, 1854,	Still at school.	
12. Wm. Tonner, .	January, 1853,	Went home,	March, 1854.
13. John Callaghan, .	June, 1853,	Still at school.	
14. John Doherty, .	October, 1853,	Do.	
15. Charles Lynch, .	December, 1853,	Left,	January, 1854.
16. John M'Closkey, .	January, 1854,	Still at school.	
17. John Gormly, .	May, 1854,	Do.	
18. Edward Doherty, .	May, 1854,	Do.	
19. Patrick Doherty, .	May, 1854,	Do.	
20. Philip Granny, .	August, 1854,	Do.	
21. James Doherty, .	August, 1854,	Do.	
22. Patrick Gallen, .	December, 1854,	Do.	
23. Thomas Johnston,	November, 1854,	Do.	

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Loughash Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	430	17	0	By amount received for Grain,	44	14	3
" Paid for Labour,	59	18	10	" " Roots, &c.,	49	19	0
" Free Labour of Pupils,	37	17	10	" " Cattle Sold,	128	11	0
" Paid for Farm Seeds,	3	18	6	" " Dairy Produce,	68	6	2
" " Manures,	7	8	0	" " Eggs and Poultry,	3	14	6
" " Cattle,	10	10	0	By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	441	15	0
" " Feeding Stuffs,	1	11	0				
" " Implements and Repairs,	8	10	1				
" " One year's Rent of Farm,	33	14	11				
" " " Poor Rate,	2	2	6				
" " " County Cess,	1	12	6				
To Profit and Loss for balance, being gain on the year,	138	18	9				
	£736	19	11		£736	19	11

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Loughash Model Farm.

TABLE showing the CROPPING of the Loughash Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.								
Turnips, { Swedes, .	3 1 0	25th May, . .	December, . .	3½ lbs., . .	18 tons, . .	Average cost of Farm per acre, £2 0s. 9d.	—	—	An average crop.
Turnips, { Aberdeens, .	1 0 0	20th June, . .	November, . .	3 lbs., . .	20 tons, . .		—	—	Ditto.
Potatoes, . . .	6 0 0	1st April, . .	October, . .	12 cwts., .	2 tons, . .		—	—	They were early cut off by the blight.
Cabbages, . . .	0 0 20	1st April, . .	November, . .	—	Not taken, .		—	—	A good crop.
GRAIN.									
Oats, ...	23 0 0	From 16th to 25th April, .	September, . .	15 stones, .	150 stones, .		—	—	A good crop.
GRASS.									
Cutting-grass, . .	3 0 0	April, . . .	June, . .	10 lbs. clover, 2 bush. grass,	2 tons, . .		—	—	A light crop.
Pasture, ...	12 0 0	—	—	—	—		—	—	
Total, . .	48 1 20								
"STOLEN CROPS."									
Cabbages, . . .	1 0 0	24th April, . .	November, . .	—	Not taken, .		—	—	These were planted in the brows of potato ridges, as detailed in my Report.

(Signed), JAMES MOORE, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

13th January, 1855.

BERNARD M'KENNA, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Sallybank Model Farm.

19. SALLYBANK MODEL AGRICULTURAL NATIONAL SCHOOL, County Clare.

Agricultural Instruction.—The average attendance at the school has fallen short of what it was in former years; and as the decrease has been principally from the more advanced boys forming the Agricultural Class, I have at times found it impossible to keep up the number heretofore instructed in that class. I have also experienced some difficulty in filling up vacancies in the Industrial Class. The decrease is chiefly owing to the constant drain on the population by emigration, and the consequent scarcity of labourers. In other respects these classes have given general satisfaction.

Model Farm.—The farm has, during the past year, been increased from eight to sixteen acres. The additional portion was taken too late last season to admit of its being tilled. I have commenced preparing a portion of it for oats and green crops. It is in a wretched condition, and requires to be drained, deepened, and manured highly, before I can expect a profitable return. In 1848 my patron, E. Bernard, Esq., kindly lent me £40, to drain and otherwise improve the eight acres constituting the original farm. An equal sum would scarcely place the additional eight acres in a working condition, as draining alone would require about £4 an acre. If £40 or £50 were judiciously expended on its improvement, I would gladly pay the *interest*, in addition to the rent, sooner than involve myself in debt again. Besides, I cannot forget the fact that I am a "tenant-at-will."

Live Stock and Dairy Management.—Under these headings, as may be seen from the "Balance Sheet," are included most of the receipts, my object being to convert the produce of the farm into milk, butter, and pork—thereby securing the greatest possible amount of manure for the farm. The loss of a brood sow and a calf told considerably against the profits of the year.

Manures.—In addition to what was made on the farm, I paid £4 for Peruvian guano, and £1 9*s.* for lime. The guano, at the rate of six cwt. to the statute acre, gave a fair return of late turnips. For Swedes I applied it at the rate of three cwt. to the acre, together with fourteen tons of farm-yard manure. The return fell short of previous years, owing, I fear, to adulteration of the guano. I had also a small quantity of a manure called "British Economic" given me by a neighbouring gentleman, anxious that I should give it a fair trial. I applied an equal money value of it and guano to two plots, treated alike in every respect for late turnip. The latter gave a fair return; while the return from the former was next to nothing. For this I was prepared, as I had seen an analysis of it, wherein its value was said to be about £2 per ton, though sold at £12.

Permanent Improvements.—I have just completed subsoiling one rood, statute, for parsnips and carrots, which cost £1 5*s.*, or 7½*d.* per perch. While rejoicing sincerely at the increased rate of wages of the agricultural labourer, and the consequent general improvement of his condition, I beg to direct your attention to the fact that the above work could, in 1850 or 1851, be done for 4*d.* per perch, wages being then from 6*d.* to 8*d.* per day; whereas now it is 12*d.* In addition to this, I have always made it a point to subsoil the furrows of potatoes grown in ridges; vetches and late turnips grown in plates or ridges have the furrows deepened. By this process a portion of the soil is deepened every year, and an immense quantity of stones removed. The amount expended under this heading will be seen in the balance sheet.

Progress of Agricultural Improvement, &c.—I am sorry to have to state that agricultural improvements in this locality are of rare occurrence. It is not for me to enumerate the causes which retard progress. I hope time and experience will demonstrate the truth of the aphorism, "Example is better than precept;" and that, when the profitable results of those executed on this farm become more evident, many others will follow our example.

Concluding Observations and Suggestions.—This school being situated, as you are aware, in a poor, backward locality, where there are no local contributions, and little or no school fees, I am compelled to supply it with requisites at my own expense. I have long felt the want of a geological map of Ireland: would not the Commissioners supply it at a reduced price? If the following recommendation of one of our Head Inspectors be complied with, would it not be well to include some *agricultural* works for the Agricultural Teachers?—"To enable the teachers to cultivate the language in this spirit, and to make the works they may require for the purpose accessible to them, I would suggest that the Commissioners establish in each district a *Teachers' Library,* which should consist of works on education and English literature, and a few well-selected volumes of history, travels, and popular science." Another Head Inspector has written as follows on the same subject:—"The compilations of 'Specimens of British Poetry, with Biographical Sketches of the Writers,' now on the eve of being issued by the Commissioners, may effect material improvement in that department; but until both School and District Libraries be established in addition, the fountains of English literature remain partially sealed against them."

As the *ex parte* statements of an agricultural teacher as to his success in carrying out the objects of his mission may fail in convincing the sceptical, it is desirable that they should be supported by the testimony of those whose position precludes any idea of flattery or exaggeration. It is, therefore, with great satisfaction that I submit the following communication, which I had the honour of receiving from Philip Reade, Esq., of Scariff, a gentleman whose agricultural improvements and exertions for the social amelioration of his tenantry are well known:—

The Woodparks, Scariff, Feb. 26, 1855.

SIR,—I have watched with great interest, for several years, the progress of the farm you cultivate. Having reclaimed and cultivated great tracts of inferior soils myself, I felt an interest in your proceedings on a piece of mountain undoubtedly much inferior to any I ever attempted to reclaim. It has no surface; a wretched wet subsoil, retentive, and of the most discouraging description. That you could extract any crops, except by great skill, labour, and expense, was an impossibility; you have done as much as the land admits of, and more than I expected. In fact, it is that species of mountain land that I consider unfit for cultivation, because it would not repay the outlay, and could never be made permanently good.

I am very happy to certify that you have effected as much with it as it is capable of, and that it required the greatest and most constant labour, skill, and courage to attempt its improvement.

I remain your obedient servant,

PHILIP READE.

Mr. Ryan, Model Farm, Sallybank.

It would be superfluous to seek stronger or more valuable evidence as to the energy and success with which my labours have been prosecuted.

JEREMIAH RYAN, Agricultural Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Sallybank Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	84	19	0
„ Paid for Labour (including £18 10*s*. for servant boy and servant maid),	28	14	9
„ Free Labour of Pupils,	5	0	0
„ Paid for Farm Seeds,	5	0	4
„ „ Manures,	5	9	0
„ „ Cattle,	39	1	10
„ „ Feeding Stuffs,	16	13	5
„ „ Implements and Repairs,	1	3	3
„ „ One year's Rent of Farm,	7	10	0
„ „ „ Poor Rate,	0	3	0
„ „ „ County Cess,	0	11	8
To Profit and Loss for balance, being gain on the year,	10	11	8
	£204	17	11

Cr.

	£	s.	d.
By amount received for Grain,	3	15	4
„ „ Roots, &c.,	17	6	10
„ „ Cattle Sold,	41	7	10
„ „ Dairy Produce,	36	10	10
„ „ Eggs and Poultry,	5	7	3
By Inventory and Valuation taken at close of the year,	96	19	10
By permanent improvements effected during past year,	3	10	0
	£204	17	11

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Sallybank Model Farm.

TABLE showing the CROPPING of the Sallybank Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes, . . .	1 1 30	March, . . .	July to September,	80 stones, .	6 tons, 15 cwt.,	11 0 0	2 10 0	—	In 1853 nearly three-fourths of the potatoes were diseased; in 1854 about one-half. The sums set down here as profit is the apparent profit per acre. Under a different arrangement from what I pursued there would be a loss by some of the crops. Oats, for example, if charged with the entire of the time applied to the land last April, would leave 15*s.* per acre only, instead of £1 14*s.* On the whole it will be seen that the profit here set down as the "Results of Cultivation," does not materially differ from that in the balance sheet.
Turnips, ...	1 0 30	3rd June, . .	November and Dec.,	4 lbs., . .	16 tons, . .	9 10 0	4 10 0	—	
Mangels, ...	0 1 3	1st May, . .	November, . .	4 lbs., . .	14 tons, 5 cwt.	9 10 0	4 15 0	—	
Parsnips, . . .	0 0 18	1st April, . .	November, . .	5 lbs., . .	7 tons, 10 cwt.,	11 0 0	4 0 0	—	
Carrots, ...	0 0 3	1st April, . .	November, . .	6 lbs., . .	9 tons, . .	11 0 0	2 10 0	—	
Cabbages, . . .	0 0 20	March, . . .	July to December, .	Plants, 2 ft. by 1½,	12 tons, . .	11 0 0	1 0 0	—	
GRAIN.									
Oats, ...	1 0 4	15th April, . .	3rd week of Sept., .	12 stones, .	84 stones, .	3 10 0	1 14 0	—	
GRASS.									
Winter vetches, . .	0 3 10	October, 1853, .	June to August, .	14 sts. including rye,	10 tons, 12 cwt.,	3 18 0	1 8 0	—	
Summer vetches, . .	0 1 20	April, 1854, . .	August to October,	14 sts. including oats,	12 tons, 3 cwt.,	3 18 0	2 3 6	—	
Hay, ...	1 1 30	With oats in '52 & '53,	July, ...	—	1 ton, 10 cwt.,	2 2 0	0 18 0	—	
Grass for soiling, . .	0 3 8	Do.	May to September,	10 lbs. clover, 2 bush. rye-grass	5 tons, 10 cwt.,	2 10 0	0 5 0	—	
Pasture, . . .	8 0 0	—	—	—	Scarcely worth rent.	—	—	—	
Waste, ...	0 1 24	—	—	—	—	—	—	—	
Total, . .	16 0 0								
"STOLEN CROPS."									
Late turnips, . . .	0 2 20								
Swedes and mangels, transplanted, .	0 0 24	—	—	—	—	—	—	—	The "Stolen Crops" were not weighed.
Rape and cabbages, .	0 0 16								
Total, . .	0 3 20								

(Signed), JEREMIAH RYAN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief,

EDWARD BERNARD, Manager.

27th January, 1855.

20. BELVOIR MODEL AGRICULTURAL SCHOOL, County Clare.

Belvoir Model Farm.

13th January, 1855.

Agricultural Class.—There are twenty-four pupils in this class at present. The attendance during the last year was, on the whole, satisfactory, much more so than in any year since my taking charge of the school, especially when it is considered that another school came into operation during the year in this parish, and within a short distance of this, as well as that a number of the pupils attending here emigrated during the same period.

Industrial Class.—The pupils of this class have given me much satisfaction, having satisfactorily progressed in their studies, both literary and agricultural.

Model Farm.—No alterations have taken place in the rotations pursued on this farm since 1852. The proper periods of sowing and planting the various crops were judiciously taken advantage of, and consequently the return (save in barley) was a very fair average. There were no peculiarities in the system of cropping calling for any particular notice.

Live Stock, &c.—The live stock on the farm at present consists of one cow, one calf, eight sheep, two brood sows, eight young pigs, and a donkey, all of which are most carefully attended to. Had there been sufficient capital to work the farm, and purchase stock, it would, of course, be capable of sustaining a great deal more.

Manure.—The collection, preservation, and application of manure, the farmer's mainstay, receive the greatest possible attention; that from the cow-house and piggery, is mixed in alternate layers with leaves, rotted weeds collected during the spring and summer, road-scrapings, &c., all of which tend to absorb the liquid, the essence of the manure, and thus preserve the most valuable part from being wasted, the whole is thoroughly incorporated by being turned a few weeks before being used; that from the fowl house, together with peat-mould, placed under the pigs to absorb the liquid, is carefully preserved as a stimulant for the green crops. Guano, at the rate of three cwt. per acre, in addition to eighteen tons of farm-yard manure, was applied, with the very best results to the turnip crop; the guano was dropped in dibble holes under the seed, with the precaution of drawing a small portion of earth over it prior to depositing the seed, to prevent them coming in contact.

Permanent Improvements.—There were no permanent improvements executed on the farm within the year, not having capital for the purpose, and none being absolutely required, a vastamount having been effected by the patron and former teacher.

Agricultural improvement has progressed most satisfactorily in this locality during the year; the aspect of the country presenting a happy contrast now to what it did some time since.

In conclusion, I have only to add, that though the difficulties which stood in the way of the successful working of our agricultural department, and to which I had directed attention in my last Report, have not been removed, still I feel justified in saying, that to a considerable extent I have been successful, which must be attributed in a very great degree to my patron's unabated kindness and indulgence, for which I here beg to return him my most sincere thanks.

THOMAS MADDEN, Agricultural Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Belvoir Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	44	18	2
„ Paid for Labour,	8	18	2
„ Free Labour of Pupils,	7	0	0
„ Paid for Farm Seeds,	4	0	4
„ „ Manures,	0	19	6
„ „ Cattle,	13	11	2
„ „ Feeding Stuffs,	1	12	6
„ „ Implements and Repairs,	0	10	11
„ „ One year's Rent of Farm,	12	0	0
„ „ „ County Cess,		—	
To Profit and Loss for balance, being gain on the year,	24	11	6
	£118	2	3

Cr.	£	s.	d.
By amount received for Grain,	6	13	9
„ „ Roots, &c.,	21	11	2
„ „ Cattle Sold,	10	12	3
„ „ Dairy Produce,	10	13	11
„ „ Eggs and Poultry,	3	15	8
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	64	15	6
	£118	2	3

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Belvoir Model Farm.

Table showing the Cropping of the Belvoir Model Agricultural National School Farm for 1854.

rops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
Green Fallow Crops.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes, ...	1 2 10	February to May, .	September and Octr.,	90 stones, .	680 stones, .	8 10 0	18 9 9½	—	The potatoes planted in February were large and sound; those planted in April were large, but much diseased; and those planted in May were small, but perfectly sound.
Turnips, ...	0 3 0	6th June, . .	4th December, .	8 lbs., . .	18 tons, . .	7 7 6	5 5 4½	—	
Mangels, ...	0 0 25	7th May, . .	November, . .	3 lbs., . .	16 tons, . .	8 10 0	1 5 0	—	
Cabbages, . . .	0 0 30	March and April, .	June to January, .	2¼ ft. by 1¼ ft.,	Not ascertained,	8 10 0	1 2 6	—	Estimated profit.
Vetches, ...	0 0 36	October & November,	May to August, .	3 bush. 3 st. rye,	16 tons, . .	6 5 0	0 10 1⅓	—	A very excellent crop.
Grain.									
Oats, ...	0 3 10	1st April, . .	September, . .	12 stones, .	147 stones, .	4 4 0	1 11 4	—	There would have been a greater profit in the oat crop, and no less in the barley crop, had they not been disposed of at the most depressed state of the market during the year.
Barley, ...	0 3 10	3rd May, . .	September, . .	10 stones, .	80 stones, .	4 10 0	—	0 16 8	
Bere, ...	0 0 20	November, . .	August, . . .	10 stones, .	60 stones, .	4 0 0	—	0 3 9	
Grass.									
Grass, first year, . .	0 3 5	May, 1853, . .	June to October, .	3 bush. Ital. rye-grass,	Not taken, .	2 0 0	—	—	
Meadow, ...	3 0 0	—	August, . . .	—	1⅓ tons, . .	1 7 6	4 17 6	—	
Pasture, ...	3 2 0	—	—	—	—	—	—	—	
Total, . .	11 3 26								
"Stolen Crops."									
Cabbages, ...	0 0 20	September, . .	Not yet, . .	2 ft. by 1 ft., .	—	6 0 0	—	—	After bere.
Transplanted Swedes, .	0 1 10	July and August, .	December, . .	2 ft. by 1 ft., .	15 tons, . .	6 0 0	1 17 6	—	After vetches and potatoes.
Total, . . .	0 1 30								

(Signed), Thomas Madden, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

12th January, 1855.

D. Wilson, Manager.

21. RAHAN MODEL NATIONAL AGRICULTURAL SCHOOL, King's Co.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Rahan Model Farm.

10th January, 1855.

Agricultural Instruction.—The Agricultural Boarders' Class was vacant during the year from the following causes:—The farmers in this locality are generally holders of from five to twenty acres of land; and the depressing circumstances under which this class have had to labour during the last eight or nine years, so much lessened their stock and capital as to require some time of prosperity to restore them to their former independent position. They are consequently for some time precluded from partaking of the advantages to be derived from having their sons educated in this class. Labourers, also, are become very scarce, and, consequently, even the farmers who can afford to pay have to retain such of their sons as are able to work on their own farms, particularly during the busier parts of the year. It is much to be regretted that there are no local contributions to aid in maintaining this class, the constant training and instruction of which would prove so useful a medium for the more extensive diffusion of improved agricultural knowledge in the district.

The "Agricultural Class" consists of forty-six boys at present: the average attendance during the year being twenty-two. I am proud to be able to state, that the members of this class have continued to uphold the same character of attention to study, and of intelligence on agricultural subjects, as reported by me in former years.

Industrial Class.—Six boys of the Agricultural Class compose the Industrial Class: they work for two hours daily on the farm during the first five days of the week, and three hours on Saturdays, and continue as stated in my former Reports to give general satisfaction, both in school, and in all their duties about the farm. It is much to be regretted that there is no arrangement adopted for retaining the most deserving members of this class on the farm to continue their course of agricultural instruction, and thus become better qualified to carry out the improved system of husbandry.

Model Farm.—No change of any importance having occurred in the course of cropping, or in the cultivation of the land from that stated in my former Reports, except having substituted wheat for oats on a part of the *lea* division, a practice not common in this locality, I think it unnecessary to detail the different operations.

Stock, &c.—The stock kept on the farm during the year varied from four to six head of black cattle, two to sixteen pigs, one pony, one sheep, and from twenty to forty poultry. It will appear from the accompanying sheet of accounts, that the live stock is the most available source of profit connected with the management of the farm. The receipts for stock of sorts, dairy produce, eggs and poultry, coupled with the estimated value of these items used in the house, (which you will perceive to be rather underrated, there being a family of six and sometimes of seven persons,) give a gross return of £55 19*s.* 5*d.* from this branch of farm industry.

Being so much in favour of the keeping of cattle and of converting every thing fitted for the purposes of feeding into as nutritious and as relishable a state as possible, and also with the view of making the most of the farm, I beg leave to again request your attention to the great loss and inconvenience consequent on the want of a cooking house, and a fowl house, and that you will suggest to the Commissioners the propriety of having these two useful appendages to the farm offices supplied.

The manure has been managed in precisely the same way as in previous years. During the summer and harvest of the past year I applied peat-mould, saturated in the tank, as a top-dressing to the grass field after each cutting, which I found to forward the growth and to increase the yield much beyond the parts not so treated.

Owing to the great barrier to the improvement of the low lands in this district not having yet been removed, little beyond what was done could be effected in the way of permanent improvements. A small quantity of drains, and the removal of stones from about a rood, were all that could judiciously be done.

Agricultural improvement in the locality may be perceived in the increased breadths sown under clover, vetches, &c., and the abandonment in some instances of the ruinous system of sowing successional crops of grain. The cultivation of turnips and mangel also engages a proportional share of the farmer's care and attention; but the success which fortunately has these two years attended the growing of the Scotch Down variety of potatoes in this district, and the high and remunerative prices to be obtained for them, induced the farmers to plant nearly the whole breadth to be manured under this crop. This, I think, is partly the means of raising the price of all sorts of feeding stuffs, and of causing the value of small and store pigs to be much under the average.

Concluding Remarks.—In Return, No. 2, which accompanies this Report, will be found the different crops cultivated, &c. It will appear from this return that the potatoes yielded less than in the preceding year; this arose from a part of the crop, where purchased seed were planted, having partly missed. The crop was very free from disease, not more than five per cent being injured. It will also appear from the same table that the mangel and turnips were sown later and did not produce so heavy a crop as in the previous year. These two defects arose from causes over which I had no control. The land laid out for these crops was, for the greater part of the spring, so saturated with water, and at times flooded as to prevent its being prepared in due time. When the water lowered, and the land became partially dry, it required a great deal of time and labour to fit it for the reception of the small seeds, which caused the sowing of them to be unavoidably late.—In the month of June, when the plants appeared most prosperous, a flood again came and inundated the greater part of them; thus very materially checking their growth and causing a considerable reduction in the weight of the crops.

As stated in the last Report on this School, the profits arising from cultivation in Return, No. 1, is realised from about ten statute acres, the remainder not being arable, and scarcely worth the rent. The amounts paid for fuel, £2 10*s.* and to servant-maid, £2, might appear at first sight much too low: in the first case, the amount paid is the cost of cutting and drying the turf, it having been drawn home by the pony kept on the farm. As to the latter it is only necessary to state, that the servant-maid is boarded in the house, and is employed for general household as well as farm work.

PATRICK FLANAGAN.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Rahan Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	94	17	6
" Paid for Labour,	14	6	10
" Paid servant maid, being boarded in the house,	2	0	0
" Free Labour of Pupils,	3	0	0
" Paid for Farm Seeds,	3	15	7
" Grass Seeds saved from the Hay, and sown,	2	0	0
" Paid for cutting and caring turf for fuel, being drawn by pony,	2	10	0
" " Cattle,	19	1	6
" " Feeding Stuffs,	6	12	2
" " Implements and Repairs,	3	15	7
" " One year's Rent of Farm,	11	16	6
" " " Poor Rate,	0	8	11
" " " County Cess,	0	7	8
" Miscellaneous Expenses,	1	1	8
To Profit and Loss for balance, being gain on the year,	43	19	4
	£209	13	3

Cr.	£	s.	d.
By amount received for Grain,	31	19	3
" " Roots, &c.,	5	7	6
" " Cattle Sold,	30	18	0
" " Dairy Produce,	8	13	11
" " Eggs and Poultry,	1	17	6
" Grass Seeds saved from hay, and sown,	2	0	0
" Dairy Produce used in House by Family—Six persons,	9	0	0
" Eggs and Poultry, " "	3	0	0
" 39 cwt. potatoes, " "	6	6	6
" 1 Pig killed, " "	2	10	0
" 7 Barrels of Oats made into meal, "	4	10	0
" Vegetables, " "	1	10	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	102	0	7
	£209	13	3

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Rahan Model Farm.

TABLE showing the CROPPING of the Rahan Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	1 0 34	April,	October,	7 cwt.,	8 tons, 12 cwt.,	6 17 6	6 4 3½	—	Partially missed, but very free from disease.
Mangel Wurzel,	0 1 0	20th May,	November,	2½ lbs.,	22 tons,	7 9 0	3 2 [illegible]	—	Produce would be greater but for flood, which covered a part of these two crops in June, and checked the growth very much.
Swede Turnips,	0 0 27	26th May,	December,	2⅓ lbs.,	24 tons, 10 cwt.,	7 9 0	2 2 6½	—	
Aberdeen do.,	0 0 27	1st week in June,	November,	2⅓ lbs.,	26 tons,	7 9 0	1 16 3½	—	
Turnips after Vetches,	0 1 0	2nd week in July,	November,	2½ lbs.,	16 tons,	6 10 0	1 3 6	—	
Rape and Cabbages do.,	0 0 34	3rd week in July,	November and Dec.,	25,000 plants,	Not weighed,	5 16 0	0 14 10½	—	Estimated by the value for feeding.
GRAIN.									
Wheat after Green Crop,	1 1 26	3rd week in Dec.,	End of August,	9 stones,	5 brls. 3 stones,	4 7 0	8 3 10	—	Drilled.
Do. on lea,	1 0 34	2nd week in Dec.,	End of August,	10 stones,	4 barrels,	4 16 0	3 0 7½	—	Ridged.
Oats on lea,	1 0 8	1st week in March,	End of August,	12 stones,	10 barrels,	4 10 0	3 3 0	—	Hopetown variety.
Do. after Green Crop,	0 3 16	1st week in April,	September,	11 stones,	11½ barrels,	4 0 0	3 9 11	—	A part of this crop was also flooded in June.
GRASS.									
First crop Clover & Grass,	2 1 2	4th week April, 1853,	May to October,	3 bush. grs. seed, & 10lbs. clover,	3 tons, 4 cwt.,	3 12 0	13 5 1	—	Top-dressed with peat-mould saturated in the tank, after the first cutting.
Second crop,	—	—	July to September,	—	2 tons, 1 cwt.,	—		—	
Third crop,	—	—	September to Nov.,	—	1 ton, 2 cwt.,	—	—	—	On about half the division.
Grass subject to floods,	2 1 10	—	Grazed,	—	Worth about the rent.	—	—	—	
Garden, waste, &c.,	1 1 25	—	—	—	—	—	—	—	
Total,	12 3 3								
"STOLEN CROPS."									
Winter Vetches,	0 1 34	21st October, 1853,	May and June,	10 stns. vetches, and 2½ stones rye,	15tns.18cwt.3qrs.	3 9 6	2 0 4½	—	About half a manuring applied.

(Signed), PATRICK FLANAGAN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 10, 1855. JOSEPH FITZGERALD, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Dromisken Model Farm.

22. DROMISKEN MODEL AGRICULTURAL SCHOOL, County Louth.

January, 1855.

Agricultural Instruction.—Agricultural Boarders.—This class at present consists of two boys, one a "*paying*," the other a "*free*" pupil. The zeal and attention evinced by them in the discharge of their duties, and in the prosecution of their studies, have been unremitting; and their progress in literary and agricultural knowledge has been most satisfactory.

Agricultural Class.—The average attendance of this class during the past year varied from sixteen to thirty boys. They receive agricultural instruction during half an hour each day, Saturday excepted; and I am happy to be enabled to state, that they evince an earnest desire to become acquainted with the different subjects brought under their notice.

Industrial Class.—The members of this class, six in number, continue to give general satisfaction. They work on the farm two hours each day (except during the inclement weather) at such light work as they are capable of performing.

Model Farm.—It is most gratifying to me to be in a position to state, that the results of the past year's transactions have been attended with very great success, as will appear from the balance sheet accompanying this Report. The different crops grown on the farm, without exception, exhibited as fair a return as could be reasonably expected; and in corroboration of this statement, I beg to submit the following extract from the Report of Mr. Brogan, Assistant Agricultural Inspector, who inspected both the school and farm, on the 12th August last:—"I feel happy in being again enabled to state, that the agricultural department continues to be conducted with the utmost efficiency. Nothing can be more gratifying than the appearance of the Model Farm, which, every where, affords evidence of the greatest care and skill in its cultivation." As the management and mode of culture were described at length in a previous report, I deem it unnecessary to enter into the details at present.

Live Stock and Dairy Management.—The system of house-feeding is fully exemplified on this farm; and the results, I am happy to say, have been most satisfactory. The stock at present consists of two cows, one two-year-old heifer, one calf, six pigs, and a strong pony.

Manure.—Every attention is paid to this important department of husbandry. Owing to the system of house-feeding the cattle, a very large supply of manure is annually collected. The heap is made up of farm-yard manure, the weeds and refuse picked off the farm during the season, and peat-mould, saturated with the liquid from the cow-house, and mixed in alternate layers with the dung. Due care is taken to have the heap covered with earth at least twice each week, so as to prevent the escape of its gaseous substances. The heap is turned once before applying it to the soil.

Permanent Improvements.—The only permanent improvement effected during the year was the excavation of the ground intended for a haggard, to the depth of three feet, and enclosing it by a permanent fence, faced internally with stone, and planted with privet and thorn.

Progress of Agricultural Improvement.—I have no doubt but the example set by the Model Farm has had a good effect on the small farmers in the neighbourhood, in stimulating them to adopt a better system than heretofore. They now pay the strictest attention to the preparation of the soil for the reception of "green crops," which they endeavour to grow to an extent proportioned to the size of their holdings.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dromisken Model Farm.

I beg to express my most sincere and grateful thanks to the noble proprietor, the Right Hon. Lord Clermont, and to the manager, the Rev. Thomas Callan, P.P., for their kind patronage, and the warm interest they continue to manifest in the prosperity of this institution; and I am sure it must be a source of gratification to them, as well as to the National Board of Education, that the Model Farm is fully realizing the objects for which it was established.

PATRICK QUINN, Literary and Agricultural Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dromisken Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	184	8	8
„ Paid for Labour,	17	17	10½
„ Free Labour of Pupils,	5	10	0
„ Paid for Farm Seeds,	8	14	6
„ „ Manures,	2	8	0
„ „ Cattle,	13	0	0
„ „ Feeding Stuffs, &c.,	7	10	0
„ „ Implements and Repairs,	0	18	0
„ „ One year's Rent of Farm,	13	10	0
„ „ Poor Rate,		—	
„ „ County Cess,	1	6	0
To Profit and Loss for balance, being gain on the Year,	30	14	9½
	£285	17	10

Cr.	£	s.	d.
By amount received for Grain,	44	2	6
„ „ Roots, &c.,	20	0	0
„ „ Cattle Sold,	38	3	0
„ „ Dairy Produce,	15	16	4
„ „ Eggs and Poultry,	1	12	6
By Farm and Dairy Produce used by family,	12	4	6
By Inventory and Valuation taken at the close of the year, inclusive of proportion of permanent unexhausted improvements,	153	19	0
	£285	17	10

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dromisken Model Farm.

TABLE showing the CROPPING of the Dromisken Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation. Profit.	Result of Cultivation. Loss.	Observations.
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	2 0 4	March and April,	2nd & 3rd week in Oct.	5 barrels,	38 brls., sound,	9 10 0	7 2 6	—	A very good crop.
Turnips,	0 3 9½	June,	2nd week in Dec.,	4 lbs.,	16 tons,	9 0 0	4 6 8	—	A fair crop.
Mangels,	0 3 25½	1st week in May,	1st week in Nov.,	4 lbs.,	29 tons,	10 4 8	14 10 0	—	An extremely good crop.
Carrots,	0 0 19½	2nd week in April,	1st week in Nov.,	6 lbs.,	18 tons,	11 0 0	12 10 0	—	An excellent crop.
Cabbages,	0 0 38½	2nd week in April,	Used occasionally for cows and pigs,	Transplanted,	20 tons,	8 10 0	4 15 0	—	Very good.
Parsnips,	0 0 6½	2nd week in April,	1st week in Nov.,	6 lbs.,	—	—	—	—	
Cabbage Plants,	0 0 4	—	—	—	—	—	—	—	
GRAIN.									
Barley,	2 0 0½	3rd week in April,	2nd & 3rd week in Sept.	14 stones,	18 barrels,	8 10 0	8 14 0	—	A splendid crop.
Oats,	2 0 4	1st week in April,	2nd & 3rd week in Sept.	13 stones,	12 barrels,	8 0 0	6 0 0	—	A very fine crop.
GRASS.									
Clover and Rye-grass,	1 3 11½	1st week in May,	1st cutting in June, and 2nd in Sept.,	Rye-grass 4 bushels, and 8 lbs. of red clover,	2¼ tons,	2 10 0	3 5 0	—	Smaller produce than in former years.
Permanent Pasture,	0 0 16½	—	—	—	—	—	—	—	
Total,	10 0 20								
"STOLEN CROPS."									
Cabbages,	0 2 4	October,	May,	—	—	—	—	—	The stolen crop to be succeeded by turnips.
Total,	0 2 4								

(Signed),

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief,

PATRICK QUINN, Teacher.

THOMAS CALLAN, Manager.

January 31, 1855.

23. LOUGHREA MODEL AGRICULTURAL NATIONAL SCHOOL, County Galway.

Loughrea Model Farm.

January, 1855.

Agricultural Instruction.—I regret to say, that although this school has been in constant operation for the last twelve years, proper accommodation has not yet been supplied for agricultural boarders, and therefore none have yet entered; notwithstanding several applications have been made, even from remote counties, for admission. Neither is there an "Industrial Class" yet established in this school. It is hardly necessary to remark that these two defects seriously retard the well-working of this establishment. In order to remove the latter of these defects, I intend, as soon as possible, to form an "Industrial Class" at my own expense.

Agricultural Class.—The number in this class for the past year varied from eighteen to twelve, the numbers at the beginning and end of the year respectively, and which show a decrease of six on the preceding year. This decrease may be attributed principally to the want of an Industrial Class. Those who have attended regularly have acquired a fair amount of agricultural knowledge, both theoretical and practical.

Model Farm.—No change has taken place, either as to extent or system of cropping, since my last Report. I am thankful to be able to say, that the degree of success attending the operations on the farm for the past year is highly satisfactory. The crops in general were good, except one rood of potatoes, which suffered severely by the blight.

Live Stock.—This, at present, consists of one cow, three heifers, a calf, and a pig, in addition to which two springers were fed during three months in summer, during which season they were constantly house-fed, except two or three hours each day; and in winter, when the weather is answerable, they are allowed one hour each day for exercise. The regular feeding and cleaning of these animals are strictly attended to.

Farm-yard Manure, of which I had a sufficient supply, was collected, preserved, and applied in the same careful manner as formerly. No extraneous manures were required. The only permanent improvements effected during the year were building and repairing a few perches of a stone wall on the boundary of the farm.

HENRY BROLLY, Agricultural Teacher.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Loughrea Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	54	9	0
" Paid for Labour,	12	12	2
" Free Labour of Pupils,	1	0	0
" Paid for Farm Seeds,	1	17	0
" " Manures,	—		
" " Cattle,	37	9	6
" " Feeding Stuffs (Hay),	2	15	0
" " Implements and Repairs,	0	6	9
" " One year's Rent of Farm,	9	0	0
" " " Poor Rate,	0	11	6
" " " County Cess,	1	3	2
To Profit and Loss for balance, being gain on the year,	30	12	11
	£151	17	0

Cr.	£	s.	d.
By amount received for Grain,	23	18	9
" " Roots, &c,	12	6	0
" " Cattle Sold,	43	14	3
" " Dairy Produce,	4	5	6
" " Eggs and Poultry,	1	10	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	66	2	6
	£151	17	0

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Loughrea Model Farm.

TABLE showing the CROPPING of the Loughrea Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Swedes, ...	1 0 0	3rd week in May,	From September to January,	6 lbs., . .	25 tons, . .	10 15 0	6 5 0	—	
Aberdeens, ...	0 0 25	1st week in June,							
White Globe, . . .	0 0 20	End of June,							
Potatoes, ...	0 2 0	Middle of March, .	End of October, .	12 cwt., . .	2½ tons, . .	8 10 0	—	1 10 0	About one-fifth unsound.
Cabbages, ...	0 0 20	Different times, .	Different times, .	Planted, . .	—	12 15 0	5 10 0	—	
GRAIN.									
Oats after green crops, .	1 2 35	End of March, .	18th to 28th Sept.,	18 stones, .	11½ barrels, .	8 16 0	4 10 0	—	
Oats after grass, 2 years, .	1 2 35	End of March, .	24th to 28th Sept.,	13 stones, .	10 barrels, .	8 16 0	8 10 0	—	
GRASS.									
Clover and grass for soiling,	1 2 35	March, 1853, . .	Middle May to Oct.,	1 stone clover, 3½ stones Italian rye-grass,	—	2 15 0	5 10 0	—	
Grass the second year, .	1 2 35	—	Grazed, . . .	—	—	—	0 10 0	—	
Total, . .	8 2 25								
"STOLEN CROPS."									
Mangels, ...	0 0 20	August, . .	December, . .	Transplanted, .	12 tons, . .	2 15 0	8 10 0	—	
Rape, ...	0 0 25	September, . .	Growing yet, . .	Transplanted, .	—	1 15 0	3 10 0	—	
Total, . .	0 1 5								

(Signed), HENRY BROLLY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 11, 1855.

P. BLAKE, Manager.

24. BALLINAKILL CENTRAL MODEL AGRICULTURAL SCHOOL, County Galway.

January 1st, 1855.

Agricultural Instruction.—There are three classes in the school receiving instructions in agriculture, and the sciences in connexion with it, viz., Agricultural Boarders, Agricultural Class, and Industrial Class. I submit the following table, which will show the number of pupils in each class, as compared with the previous year:—

	No. in Class, 1853.	No. in Class, 1854.
Agricultural Boarders,	1	1
Agricultural Class,	29	25
Industrial Class,	12	12
Total,	42	38

Agricultural Class.—Although the pupils in this class did not attend as constantly as during the previous year, they studied zealously to improve themselves while at school; and their progress in agricultural knowledge is praiseworthy to themselves, and of much benefit to their parents.

The Industrial Class attends regularly. I am happy to state that their attention to their duties and studies continues satisfactorily; and the desire which they evince to be hereafter admitted to the Model Farm, Glasnevin, shows the interest they take in the instructions imparted to them. Several of the pupils who were in this class, and who are now working at home, are judiciously directing the management of their parents' farms.

Model Farm.—The order of cropping carried out on the farm during the past year was as follows:—First field, oats, Italian rye-grass, and clover; second, potatoes and turnips; third, oats on lea; fourth, grass, first year. The soil being naturally heavy, this rotation answers well; and for the future the green fallow and grain crops will be so arranged as that only on every *eighth* year the same species of crop will be grown on the same portion of land.

No. 1 *Field,* (3A. statute measure). This field, which was under a manured green crop the year before last, was sown with oats, Italian rye-grass, and clover, on 20th of February. The oats (English white Holland) were sown broadcast, at the rate of eleven stones per statute acre. The produce of this field was fourteen barrels to the acre, and the straw was more than five feet in length. Had this field not been trenched for green crops the previous year, I am certain the corn would have lodged; but the heavy and tenacious subsoil which had been brought up gave sufficient stability to the straw, thereby allowing the grain to ripen fully. Although this crop was most luxuriant when yielding to the sickle, the Italian rye-grass and clover were fully fourteen inches high.

No. 2 *Field,* (3A.). The crops in this field were potatoes and turnips. The potatoes were planted in drills, thirty inches apart, and the sets were placed about nine inches asunder, under the manure, particular care having been taken in every instance to have the cut side of the potato next the earth. By this arrangement, the manure being placed *over* the sets, protects them from being trampled on by the horse's feet when closing the drills. The cool earth meets the cut side of the potato, instead of the putrescent manure, which would act too energetically on them; and by having the eye uppermost, the bud starts at once in an upright position. As the potato has a spreading root, and as the tubers are nearly all developed upon the under surface

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Ballinakill Model Farm.

of the fibres, which run mostly horizontally, it is very injudicious to have the sets lightly covered, and over the manure in the drills, as, in after-culture with the horse-hoe or grubber, the lateral shoots, with their attached tubers, are liable to be cut off by the lines of horse-hoe, &c.

I had one acre and two roods under potatoes this year; and at the period of their blossoming, although the drills were thirty inches apart, the stems (over three feet high) perfectly closed over the drills. Many persons who visited the farm during summer said they never saw a finer or more luxuriant crop. There were, on an average, ten or twelve sound potatoes under each stem. I had also an acre and a-half of turnips in the same field, principally Swedes. The annexed table shows the amount of produce raised, the time of sowing, and the quantity of seed per acre, &c.

No. 3 *Field,* (Oats on lea).—The soil for this crop was ploughed into eight feet sets in the month of November. The land being very poor, the furrow-slices were left only about three inches thick. The furrows were dug immediately after, and exposed to the action of air and frost during winter. At the time of sowing the seed, about two hundred cart-loads of compost were applied to this field, which I collected during the winter from different sources, viz., the scouring of hedges, peat-mould, marl, and road-scrapings. The seed was sown on the 2nd of March, at the rate of twelve stones to the statute acre. The produce was about fourteen barrels to the acre. If the soil for this crop had been ploughed four or five inches deep, and the seed only harrowed in, as in too many instances has been the case, I would not have more than eight or nine barrels to the acre. On one portion of this field I covered the oats heavily with the earth from the furrows; the result of which was, the oats grew so tall and rich that it lodged, exceeding in height, about ten or twelve inches, the straw which grew in any other part of the field.

No. 4 *Field,* (Grass for soiling).—This being the second year since I adopted the four-course rotation (in order to get into the shift at once), the land was left in permanent pasture up to this.

Live Stock and Dairy Management.—The stock kept on the farm during the past year was three cows, three heifers, three calves, and five pigs, all of which were house-fed on the produce of the farm, nothing having been purchased for this purpose only £2 worth of hay. The cattle are cleaned every morning, and fed and milked at fixed periods. They get six feeds daily, and one hour to exercise on a small field detached from the Model Farm. Having always a sufficiency of green and succulent food, the cows return a fair profit in milk and butter, besides the large quantity of manure left by them.

Manures.—Having a supply of marl adjoining the farm, I am enabled to have every year a large compost heap, which I apply principally to the field under oats on lea. There were no portable nor special manures used on the farm during the past year. The collection and preservation of the solid and liquid manure produced on the farm having been duly attended to, I was not under the necessity of purchasing manures.

Permanent Improvement.—When I first took charge of the Ballinakill Model Agricultural School, in the year 1843, the farm contained only 6A. 1R. 23P., statute measure. The offices then built to accommodate the number of stock which could be fed on that extent of land underwent no enlargement untill this year. Anticipating that the Commissioners would give a small grant towards enabling me to enlarge the old offices, and erect others which were required, I expended £40 on

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the improvements effected this year, the slates and timber being supplied by the patron of the school, Edward Howe Burke, Esq., who is ever zealous in promoting the system of agricultural and literary education afforded by the Board. The cow-house, heretofore, could only contain four head of cattle; it is now enlarged so as to accommodate double that number. I also built a root-house of fourteen feet square, and a pupils' dormitory of like dimensions. I feel much pleasure in being able to state that, through my exertions and the example set on the farm, this locality is rapidly improving. The manure, as heretofore, is not allowed to remain a week in the field exposed to a summer's sun; the lime, after being burnt, is not allowed to become perfectly slaked and saturated with water, before it is applied to the soil or compost heap; nor is the soil exhausted by a succession of corn crops, which was heretofore a favourite practice in this country.

Before concluding this Report, I wish to acknowledge the many obligations I am under to my patron, who affords me every means in his power to carry out the system of improved farming, which, I am happy to say, is every day progressing.

JOHN CAMPBELL.

[SUMMARY, &c.

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Ballinakill Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	176	4	3
" Paid for Labour,	18	11	0
" Free Labour of Pupils,	5	0	0
" Paid for Farm Seeds,	3	6	0
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	2	0	0
" " Implements and Repairs,	4	10	0
" " One year's Rent of Farm,	9	6	8
" " " Poor Rate,	—		
" " " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	68	5	1
	£287	3	0

Cr.	£	s.	d.
By amount received for Grain,	24	10	0
" " Roots, &c.,	—		
" " Cattle Sold,	23	0	0
" " Dairy Produce sold,	7	5	11
" " " used in house,	11	7	9
" " Eggs and Poultry,	0	11	0
By inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	220	8	4
	£287	3	0

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Ballinakill Model Farm.

TABLE showing the CROPPING of the Ballinakill Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Skirving's Swedes,	0 2 30	20th May,	15th December,	3 lbs.,	26tns.13cwt.3qrs.	7 14 0	15 4 0	—	
Laing's do.,	0 2 30	22nd May,	15th December,	3 lbs.,	27 tons,	7 14 0	15 4 0	—	
Purple-top Aberdeens,	0 0 10	1st June,	1st November,	3 lbs.,	25 tons,	7 11 0	9 16 0	—	
Green-top do.,	0 0 10	1st June,	1st November,	3 lbs.,	25 tons,	7 14 0	9 16 0	—	
Potatoes (green-tops),	1 2 0	4th March,	29th September,	10 cwt.,	8 tons 13 cwt.,	7 14 0	27 18 0	—	
GRAIN.									
Oats—English white Holland,	6 0 0	2nd March,	4th September,	11 stones,	14 barrels,	2 18 0	6 18 0	—	
Grass,	3 0 0	—	—	—	—	—	—	—	
Total,	12 0 0								

(Signed), JOHN CAMPBELL, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

13th January, 1855.

EDWARD HOWE BURKE, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Castlehacket Model Farm.

25. CASTLEHACKET MODEL AGRICULTURAL NATIONAL SCHOOL, County Galway.

January, 1855.

Agricultural Instruction.—Agricultural Boarders.—At the commencement of the year I had one agricultural boarder, and there has not been any increase or diminution in this class since.

Agricultural Class.—On the 31st December, 1853, there were fourteen pupils upon the roll of the agricultural class; and during the year just closed, seven pupils were admitted, and six removed, thus leaving fifteen pupils on the roll of this class, upon the 31st December, 1854. Of the six pupils struck off the roll within the year, three entered shops or merchants' stores, one emigrated to America, and two are at home labouring on their fathers' holdings.

Industrial Class.—The industrial class is paid by the Board, and is composed of those pupils who attend with the greatest regularity, and who, on examination by the manager, distinguish themselves most highly in their several branches of study.

Order and Progress of the Classes.—Of the good order, attention to business, and proficiency of these classes, I am enabled to reiterate the satisfactory statements contained in my former reports. From the oldest to the youngest, the pupils composing them display a willingness to work on the farm, and a desire to learn when in the school-room, such as could scarcely be expected from children of their age. But perhaps the best test of their assiduity, on the farm at least, is to be found in the labour list, from which you will see that the only expenses I have been put to are for horses to plough and harrow, and a few men to reap the harvest, and thresh fodder. All the rest of the work was performed by the pupils and myself—and performed efficiently, as Mr. Brogan, and others who have seen it, can testify.

The Farm.—The crops cultivated on the farm during the year were potatoes, turnips, mangels, carrots, cabbages, turnips for seed, oats, clover for hay and soiling, and some garden vegetables. The potatoes were planted in drill, in the latter end of February, and manured with farm-yard dung, at the rate of about forty cart-loads to the Irish acre. The description planted was the "green-top," or "Protestant," which experience has proved to be the best for this locality. The crop was free from blight—the number diseased being merely nominal—but the return was not equal to what I expected; and the same remark may be made of this locality generally.

Mangels and Carrots.—Owing to the great drought which prevailed in April and May, the mangels and carrots were so much injured that I was obliged to plough the greater part of them down, and sow the land again with turnips. In one place I transplanted Swedes very carefully, and with very great success, the crop being fully equal, if not superior, to where the seed was sown.

Saving Turnip Seed.—I have been so repeatedly disappointed by getting bad turnip seed, that for the future I am resolved to save my own. Last year I made a beginning. In the month of January I chose out some well-formed bulbs and planted them in good soil, well manured, at the distance of two feet from each other. The space occupied was four statute perches, and the produce when the seed was prepared and cleaned, was sixteen pounds; but it would have been much more but for the birds (larks and yellow-hammers) which destroyed probably one-half before it was ripe. I tried several means to frighten these pests without effect; and if any of my fellow teachers shall attempt to save their own turnip seed, they will do well to plant the bulbs in a convenient place where they can watch these depredators. The seed was ready for removing in the end of June, and some of it which I sowed the first week in July produced a pretty fair crop of Swedes.

Live Stock, &c.—I reduced my stock of black cattle since July, in consequence of the clover hay crop not doing as well as I expected. I could now increase it, but I conceive it will be better for the land, and equally profitable to myself, to have the turnips eaten off by sheep. One cow is sufficient to supply the house with milk and butter, and owing to the backward locality in which I live, it is not convenient to dispose of dairy produce, even if I had it to spare. In this neighbourhood it is sheep, and not black cattle, to which the farmer looks for profit; as consuming the green crops on the ground is more profitable than carting them into the yard to black cattle, and then carting the manure out again.

Manures.—Every man's efforts are limited by his resources; and the means of procuring manure in this locality are very limited indeed. There are no road-scrapings, nor earth from old useless ditches, (the fences here being all of stone,) while the quantity of straw which grows upon one acre, when reduced to manure, would go but a very limited length to supply the wants of another acre about to bear a geen crop. There is, therefore, but two alternatives,—to purchase extraneous manures in the way of bone dust, guano, &c., or else to purchase and cart bog-mould from a distance of three and a-half miles. The value of this latter article, however, when saturated with the urine and droppings of the cattle is so great, that I would prefer it to all other mixtures, home or foreign, for this light land. Hitherto I was unable to get it in sufficient quantity, owing to the cost of carriage, but last autumn I purchased a pony, and for the future I trust I shall be independent of foreign manures.

Permanent Improvements.—The only permanent improvements necessary on this farm were fencing and subsoiling, and both these were effected years ago by the manager, who still continues to bestow his fostering care upon the institution.

Agricultural Improvement.—As far as I am able to judge, farm husbandry is progressing favourably in this district. There is a greater breadth of wheat sown this year than usual, and owing to the favourable state of the weather, all other kinds of labour are advancing rapidly. The remunerative prices, too, which are to be had for all kinds of grain and roots, are beginning to exercise a very apparent good effect on the condition of the working classes, who appear to be rapidly emerging from the wretched condition to which they had been reduced in years past. It also affords me pleasure to state that this increase of prosperity is not accompanied, as in former times, by intemperance.

ARTHUR GOUGH, Agricultural Teacher.

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II. Appendix to Dr. Kirkpatrick's Report.

Castlehacket Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	69	11	0	By amount received for Grain,	7	1	8
„ Paid for Labour,	3	7	6	„ „ Roots, &c.,	13	15	3
„ Free Labour of Pupils,	5	0	0	„ „ Cattle Sold,	34	6	9
„ Paid for Farm Seeds,	5	13	9	„ „ Dairy Produce,	—		
„ „ Manures,	4	0	0	„ „ Eggs and Poultry,	—		
„ „ Cattle,	27	17	6	By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	80	13	4
„ „ Feeding Stuffs,	—						
„ „ Implements and Repairs,	—						
„ „ One year's Rent of Farm,*	6	13	11				
„ „ Poor Rate,	—						
„ „ „ County Cess,	—						
To Profit and Loss for balance, being gain on the year,	13	13	4				
	£135	17	0		£135	17	0

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* *Value.* No rent being paid, the farm being given rent free by the Patron.

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Castlehacket Model Farm.

TABLE showing the CROPPING of the Castlehackct Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	1 0 34	Early in March,	October,	64 stones,	800 stones,	7 6 3	5 0 3	—	The leaves partially blighted in July.
Turnips,	2 0 0	May and June,	—	4 lbs.,	12 tons,	7 0 0	3 0 0	—	Almost free from "fingers and toes."
Carrots,	0 1 0	Early in April,	—	4½ lbs.,	—	7 10 0	—	—	This crop failed entirely in consequence of drought, but I ploughed the ground again and planted turnips which grew very well.
Cabbages,	0 0 20	February and March,	—	2 feet apart,	Eaten off.	—	—	—	
Garden Vegetables,	0 0 34	—	—	—	—	—	—	—	
Mangels,	0 0 20	1st week in May,	—	5 lbs.,	—	7 0 0	—	—	Same remark as above.
GRAIN.									
Oats,	4 1 0	March and April,	September,	12 stones,	6 barrels,	0 11 10	4 0 0	—	
Turnips for seed,	0 0 4	January,	3rd week in June,	2 feet apart,	390 lbs.,	3 0	13 0 0	—	This seed is of a most excellent quality; I sowed part of it in the 1st week of July, and have a fair crop of Swedes on it. All free from "fingers and toes."
GRASS.									
For soiling,	1 2 0	—	—	—	—	—	—	—	
Permanent pasture,	7 0 0	—	—	—	—	—	—	—	
Total,	16 2 32								
"STOLEN CROPS,"									
Cabbages,	0 0 24	August,	—	2 feet apart,	—	7 0 0	—	—	Still on ground.

4th January, 1855. (Signed), ARTHUR GOUGH, Teacher.

II. Appendix to Dr. Kirkpatrick's Report.

Glounyarrag Model Farm.

26. GLOUNGARRAGH MODEL AGRICULTURAL SCHOOL, County Waterford.

January, 1855.

Agricultural Instruction.—As anticipated in the last Report, the domestic establishment has been enlarged for the accommodation of "agricultural boarders," and will be ready for their reception from the 31st March, 1855. I have recommended to the Patron, as "free pupil," a promising young lad from the "industrial class;" another person has spoken to me about placing his son as a paying agricultural boarder; so that, in all probability, the *Agricultural Boarders' Class* will be filled up as soon as the establishment will be ready for their reception. The agricultural class, formed from the fourth, third, and sequel classes, receives agricultural instruction for half an hour daily, as set forth in the former Report, and are steadily progressing. The industrial class is selected from the preceding, and now consists of twelve boys, six of whom are paid by the Patron, and six by the Board. This class is very efficient in working the farm to advantage, and in giving a healthy tone to the school, both in an agricultural and literary point of view.

Cultivation of Farm.—The mode of cultivation pursued up to this period was, perhaps, as judicious as could be carried on without too great an expenditure at first; but as soon as possible the culture will be more systematic, the land laid off in *five* equal divisions, and a "five-course shift" followed, as it is the rotation that seems best suited to the nature of the soil. The land is *kind*, and will yield good corn and green crops by careful tillage. The mangels grown on the farm this season were as good as could be seen in the district. The turnip crop was not what it should be, in consequence of not having a sufficiency of *farm-yard manure*. The guano applied as a substitute had not the usual effect, as the weather became very dry after its application and the sowing of the turnip seed; so that much of its fertilizing properties evaporated, and a portion of the seed failed. The deficiency of this crop has, of course, decreased the profits of the year. The potato crop, in this mountainous district, was very inferior this year; the portion grown by me, though the greatest care was taken in selecting good seed, and every attention paid to the *preparatory* and *after* culture of them, afforded a very medium produce.

Manures.—A very convenient pit and liquid-tank is attached to the farm offices, which afford every facility for the collection and preservation of manures.

Stock and Dairy Management.—I have nothing new or important to state under this head. I have not yet been able to obtain a sufficient amount of stock; but I trust, now that all the buildings requisite for constituting this an efficient and well-organized National Model Farm have been erected, through the munificence of the noble proprietor, his Grace the Duke of Devonshire, that this defect will soon be remedied, and nothing left undone to render the management not only satisfactory to his Grace and the Commissioners, but useful in promoting the diffusion of sound agricultural knowledge in this locality.

JAMES K. WALSH, Agricultural Teacher.

[SUMMARY, &c.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	48	10	6	By amount received for Grain,	13	8	9
„ Paid for Labour,	13	19	11	„ „ Roots, &c.,	21	16	3
„ Free Labour of Pupils,	3	15	0	„ „ Cattle Sold,	12	4	0
„ Paid for Farm Seeds,	10	2	6	„ „ Dairy Produce,	10	12	0
„ „ Manures,	4	9	6	„ „ Eggs and Poultry,	0	17	6
„ „ Cattle,	13	7	6	By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	57	12	0
„ „ Feeding Stuffs,	—						
„ „ Implements and Repairs,	5	12	2				
„ „ One year's Rent of Farm,	6	0	0				
„ „ „ Poor Rate,	0	17	2				
„ „ „ County Cess,	0	9	0				
To Profit and Loss for balance, being gain on the year,	9	7	3				
	£116	10	6		£116	10	6

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II. Appendix to Dr. Kirkpatrick's Report.

Gloungarragh Model Farm.

TABLE showing the CROPPING of the Gloungarragh Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					d.	£ s. d.	£ s. d.	
Turnips,	1 2 0	25th May,	December,	6 lbs.,	6 tons,	3 11 2	3 0 6	—	See Report.
Mangels,	1 0 0	14th April,	October,	5 lbs.,	10 tons,	2 6 10	6 13 2	—	Ditto.
Carrots,	0 0 20	7th April,	October,	8 lbs.,	8 tons,	3 6 8	4 13 4	—	
Potatoes,	1 0 0	March,	November,	4 barrels,	10 barrels,	4 18 10	1 1 2	—	An inferior crop.
GRAIN.									
Oats,	4 2 0	March,	September,	14 stones,	4 barrels,	2 10 6	0 15 10	—	Some of the land on which this crop grew was hilly.
GRASS.									
Rye and Winter Vetches,	0 2 0	October, 1853,	Taken at intervals from May till July,	—	Not weighed but valued,	2 4 0	1 5 6	—	
Meadow,	2 0 0	Laid down the previous year with Wheat and Oats,	July.	—	—	—	—	—	
Pasture,	1 1 20	—	—	—	—	—	—	—	
Total,	12 0 0								
"STOLEN CROPS."									
White Turnips,	0 2 0	Rye and W. Vetches in October, 1853, The stolen crop in July, 1853,	Taken at intervals from May till July, Taken at intervals from Nov. to Jan.	—	Not weighed but valued,	2 16 6	1 7 4	—	

(Signed), **JAMES K. WALSH**, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 18, 1855.

F. E. CURRY, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Kyle Park Model Farm.

27. KYLE PARK MODEL AGRICULTURAL SCHOOL, Co. Tipperary.

January, 1855.

Agricultural Instruction.—Boarding Class.—This class at the period of my taking charge, 1st March, 1854, consisted of two boys, one a *paying*, the other a *free* pupil. Another *paying* pupil was admitted on the 1st June, and left on the 29th December, with the intention of emigrating to Australia. I am happy to state that the good conduct, application to study, and desire for improvement, evinced by the two young men at present in this class are most satisfactory; and I trust that by the time they have ended their course of training here, they will be found worthy candidates for admission to the principal establishment at Glasnevin. The instructions they receive differ nothing from what are set forth in the prospectus of model agricultural schools, and the hours for attending to their several duties are the same as set forth in the time table.

The Agricultural Class numbers, on an average, twelve of the more advanced pupils of the school, who receive instructions in agriculture from half-past twelve till one o'clock, on each of the five first days of the week. These instructions are chiefly of a practical nature, such as pointing out to them the principal defects in the modes of farming practised in the neighbourhood, and how they may be remedied. There is no subject in agriculture which they require to have taught to them but is brought under their notice in this way, and with the best effect.

Industrial Class.—It was with reluctance that most of the pupils composing this class were at first induced to join it; but I am happy to find them every day becoming more willing; and when a vacancy occurs from withdrawal, irregular attendance, &c., it is immediately filled up. The number now in the class is six; most of them are very small, and not able to do much work, but the willingness with which they apply themselves to whatever work they are capable of performing more than compensates for any deficiency of physical power. They are, with only one exception, selected from the agricultural class.

Model Farm.—The farm is divided into two divisions, of nine and seven acres respectively, by the road leading to Borrisokane; the schoolhouse and farm offices are on the smaller division, and on the north side of the road; the garden is also in this division, so that the extent in it available for general cultivation is only about six acres. This division is fairly sheltered on three sides; but the other—the northern—is entirely exposed, being bounded in that direction by an extensive bog. The other division is all available for cultivation, and well sheltered on all sides.

I have mentioned these matters with a view of being better understood in describing the changes I have made on the courses of cropping previously pursued on these divisions.

The three-course rotation was followed on the larger and best sheltered division, and also on the best soil, and the four-course on the worst soil, and smaller and least sheltered division. I have retained these rotations, but I have transferred the "three-course" to the division occupied by the "four," and *vice versa.* The four-course should evidently be followed on the best soil, and on the most sheltered division, as it is better suited to the growth of "*stolen crops*" than the three-course. The subsequent divisions for each rotation are more regular.

I have nothing particular to state respecting the cultivation of the farm, the crops and mode of management being the same as are usual. All the details of preparatory and after culture were most carefully attended to; and that the year's labours have been attended with a fair share of success can be seen from the balance sheet.

Farm Offices.—These buildings, which were erected long antecedent to the establishment being taken under the exclusive control of the Commissioners, are badly arranged, and insufficient for the requirements of the farm in its improved state; and I cannot calculate much on success in live stock until there are some alterations for the better made in them. I represented to Mr. Brogan at his last visit such improvements as are necessary, and I trust his report on the matter will receive prompt attention.

Live Stock.—The stock on the farm at present are two milch cows, one working bullock, one pony, and five pigs. I do not think it advisable to adhere strictly to the house-feeding of the cattle until there are some arrangements made by which it can be done with advantage. I therefore allow them about three hours daily on the pasture, and by pursuing this course, they are continuing in good health and condition.

Dairy Management.—I have nothing new to notice in this department. Owing to the length I was without having any cows on the farm, and the quantity of milk given to calves, the receipts from the dairy are low.

Manures.—Due attention is paid to the collecting and preserving of this valuable and indispensable article. The manure heap is made up of alternate layers of peat-mould and dung from the several offices; and, as each layer is completed, it is saturated with liquid manure from the tank. The only *portable* manure used last season was eight cwt. of Chilian guano, applied in conjunction with farm-yard manure; only about one-third the usual quantity of the latter, and three cwt. of guano, per acre, to turnips. I did not get it in time to apply it to any other crops; but its effect on the turnips was most satisfactory. It was procured from Mr. Farrell, of Capel-street; and if the farmers of this locality would endeavour to procure such articles from a respectable establishment, they would not have to lament their year's labour and crop, in consequence of *bad seeds* and *bad guano*, as I have known many of them to do.

Permanent Improvements consisted in getting a grove, that ran along the roadside, cleared away; thereby affording the crops the benefit of the sun's rays, and the public a view of the model farm. Erecting a paling along the avenue, twenty-three perches long; constructing a movable fence of wooden rails, to enclose the grass division of the rotation when required for pasturage. The clearing away of the grove adds three roods to the extent of the farm; and about one-half of this has been subsoiled, and cleared of all roots, to the depth of eighteen inches.

In conclusion, I have the satisfaction to state that I have experienced the greatest kindness from the landlord, Thomas George Stoney, Esq; were it not for whose kind permission I could not have effected the improvement of clearing away the grove. I am also indebted to him for many kind suggestions, the carrying out of which have tended very much to improve the appearance of the place.

P. Stephens, Agriculturist.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	106	4	4
" Paid for Labour,	38	4	9½
" Free Labour of Pupils,	6	0	0
" Paid for Farm Seeds,	7	12	0
" " Manures,	5	0	0
" " Cattle,	27	12	6
" " Feeding Stuffs,	4	4	2½
" " Implements and Repairs,	9	0	5
" " One year's Rent of Farm,	16	0	0
" " " Poor Rate,	2	8	9
" " " County Cess,	0	15	0
To Profit and Loss for balance, being gain on the year,	43	14	1½
	£266	16	1½

Cr.	£	s.	d.
By amount received for Grain,	1	4	0
" " Roots, &c.,	7	5	2
" " Cattle Sold,	8	11	2
" " Dairy Produce,	8	18	11½
" " Eggs and Poultry,	0	18	1
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	239	18	9
	£266	16	1½

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Kyle Park Model Farm.

TABLE showing the CROPPING of the Kyle Park Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.			Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
									Profit.	Loss.	
	A.	R.	P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.											
Potatoes, ...	1	2	0	March, . . .	October, . .	12 cwt., . .	6 tons, . .	—	—	—	I had no record left me of the various operations up to the month of March, and on that account I could not give a proper estimate of the expenses of cultivation, &c.
Turnips, ...	2	2	0	May and June, .	November, . .	4 lbs., . .	25 tons, . .	—	—	—	
Mangels, ...	0	2	0	April, . . .	—	6 lbs., . .	—	—	—	—	
Carrots, ...	0	1	10	—	—	6 lbs., . .	10 tons, . .	—	—	—	
GRAIN.											
Wheat, ...	4	2	30	—	September, . .	—	5¼ barrels, .	—	—	—	
Oats, ...	1	2	0	End of March, .	—	—	13 barrels, .	—	—	—	
GRASS.											
Hay and soiling, . .	1	2	0	—	—	—	—	—	—	—	
Pasture, ...	2	3	0	—	—	—	—	—	—	—	
Total, . .	15	0	0								
"STOLEN CROPS."											
Vetches, ...	0	2	0	—	—	—	—	—	—	—	

(Signed), PATRICK STEPHENS, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 16, 1855. THOMAS GEO. STONEY, Manager.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Cahersherkin Model Farm.

28. Cahersherkin Model Agricultural School, County Clare.

January 1, 1855.

Agricultural Instruction.—When sending my last report there were three boarders here, who maintained themselves at their own expense; one of them went home since to assist his father, who farms extensively, and the other two continue here still, one of them having been appointed "*Paid Monitor.*" Now that arrangements are in progress for the proper accommodation of agricultural boarders, the Manager has appointed two who will enter in a few days.

Agricultural Class.—This class, averaging about twenty, and including the boys of the third and fourth classes, are lectured for half an hour daily, as usual, and are making satisfactory progress in their *agricultural* and *literary* studies; they have, however, lately begun to exhibit symptoms of dissatisfaction at being sent to work on the *farm.* The chief cause to which this may be ascribed is the scarcity of labour in *this* district, and the consequent desire of the parents to have the children work on their own farms in the mornings and evenings, fancying that the hour's work on the school farm might interfere with their studies, and that to attend to the *theory* in the school is quite sufficient. Knowing that it is essentially necessary to consult to a certain extent the feelings of the parents, I shall in future, in a great measure, comply with their wishes, and only take out the children *occasionally* to see the operations of the farm.

Industrial paid Class.—This class continues to give general satisfaction, and constitutes the best *literary* class in the school, their progress being a strong contradiction of the prejudicial and ignorant opinions prevailing against combined *literary* and *industrial* pursuits in this place.

Model Farm.—As may be seen from my returns of "Statistics and Cropping," herewith sent, I have been unsuccessful in the cultivation of green crops this year. I got two varieties of Swede turnips—the purple top and the green top, the latter of which never vegetated, rendering it necessary to prepare the soil over again for white globe; the former variety produced as good a crop as might be expected from the soil, which is of the worst description of retentive yellow clay. On a portion of bog adjacent to the model farm, and to be attached thereto, I got about a statute acre dug, manured with seaweed and lime at the dressing, and sowed with potatoes, and the produce, though very poor (as is generally the case with the first crop in those bogs), covered a considerable portion of the expenditure.

Live Stock and Dairy Management.—The stock fed on the farm for the past year consisted of four milch cows, three calves, from May until November (then sent to grass), one pony, and some pigs, varying in number from one to ten during the season. The cows are fed in the house during the year, and are allowed out for exercise, &c., for about three hours daily. The milk is manufactured into butter, which is sold in firkins, and obtained the highest market price during the season.

Manure.—Every attention is paid to this important branch of husbandry. Peat-mould is constantly kept in the channel behind the cows to absorb the liquid manure. The cheapest and most effective manure for the bog lands here is lime; I have seen excellent crops of turnips grown from it on moory land, without the aid of any other manure.

Permanent Improvements.—An addition to the dwelling-house of 16 feet by 13½ feet (two stories high) for the accommodation of boarders, a byre for eight cows, a barn, a cart and implement-house, a fowl-house and piggery, were built during the season. The patron, Sir Lucius O'Brien, Bart., having, with his usual liberality, advanced £25 for this

II. Appendix to Dr. Kirkpatrick's Report.

Cahersherkin Model Farm.

purpose, the remainder being supplied by myself in the shape of lime, sand, cartage, &c. In my last report I mentioned my determination of draining a division of the "five-course" field each year; but this I was unable to accomplish during the past year, on account of the difficulty of obtaining labour here, and of being obliged to send the men I had engaged for agricultural purposes to attend masons, &c., at the buildings. The amount expended on draining, fencing, &c., was only £1 11*s*. 4*d*.

It is most gratifying to see the spirit of agricultural improvement which is now beginning to operate in this neighbourhood, where nothing but prejudice against improvement and innovating improvers prevailed a few years ago. The organization of a "local agricultural society," to meet once a month, and discuss agricultural subjects is sufficient proof of this. The two young men, lately returned from training at Glasnevin, evince the greatest desire to disseminate agricultural improvement among their friends; and one of them, Mr. Jordan, has obtained the consent of his father to manage his farm on an improved system, which cannot but lead to beneficial results in the locality; the other, Mr. Molony, has been engaged to carry out improvements on Sir Lucius O'Brien's property.

In conclusion, I beg to acknowledge the continued support and co-operation of the Manager, Robert O'Brien, Esq., and his benevolent efforts to better the social and moral condition of the peasantry of this district.

PATRICK SHERIDAN, Agricultural Teacher.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Cahersherkin Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	*s.*	*d.*
To amount of Inventory and Valuation at commencement of year,	107	11	10
„ Paid for Labour,	24	8	10½
„ Free Labour of Pupils,	6	7	4
„ Paid for Farm Seeds,	7	19	7
„ „ Manures,	3	18	11½
„ „ Cattle,	12	4	6
„ „ Feeding Stuffs,	7	13	3
„ „ Implements and Repairs,	1	1	9½
„ „ One Year's Rent of Farm, } „ „ „ Poor Rate, } „ „ „ County Cess, }	4	6	0
To Profit and Loss for balance, being gain on the year,	29	9	10½
	£205	2	0

Cr.	£	*s.*	*d.*
By amount received for Grain,	3	7	8
„ „ Roots, &c.,	13	19	4
„ „ Cattle Sold,	20	13	0
„ „ Dairy Produce,	28	5	4
„ „ Eggs and Poultry,	1	6	9
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	137	9	11
	£205	2	0

Appendix I.

II Appendix to Dr. Kirkpatrick's Report.

Cahersherkin Model Farm.

TABLE showing the CROPPING of the Cahersherkin Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation. Profit.	Result of Cultivation. Loss.	Observations.
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes, . . .	1 3 25	March, . . .	October & November,	100 stones, .	3 tons, . .	12 0 0	—	—	Of this less than half produced a fair crop, but the remaining part being wild bog, produced very little more than the seed. The entire plot for turnips was sown the end of May with Swedes, and those put into one part of it never vegetated. I was therefore, obliged, to prepare it again for white globe.
Turnips, { Swedes, . .	0 3 5	May, . . .	January, . .	4 lbs., . .	15 tons, 8 cwt.,	8 5 6	7 2 6	—	
Turnips, { White globe, .	0 2 18	July, . . .	As the cattle required them	4 lbs., . .	8 tons, . .	9 8 0	—	1 8 0	
Mangels, . . .	0 0 30	1st week in May, .	December, . .	6 lbs., . .	Not worth ascertaining, .	0 10 0	—	9 0 0	
Carrots, . . .	0 0 35	April, . . .	Occasionally for the pony, . . .	6 lbs., . .	9 tons, 5 cwt., .	8 16 0	3 12 8	—	
Cabbages, . . .	0 2 35	In succession, {	Cut for cows as required, . .	Drills 2 feet apart, plants 18 in. in the row, . .	26 tons, 6 cwt.,	5 8 0	7 14 6	—	
GRAIN.									
Oats, ...	2 2 33	Last week in March, and 1st week in April,	September, . .	8 stones, . .	120 stones, .	3 5 6	3 6 6	—	
GRASS.									
Clover & Rye-grass, 1st year	1 1 33	Spring, 1853, . {	Cut for soiling in May, and for hay in July,	12 lbs. of red clover 2 bush. rye-grass, .	1st cutting not ascertained, 2 tns. hay	2 12 6	4 2 6	—	I had £1 10s. worth of rye-grass seed.
Do. do., 2nd year,	1 1 33	—	Grazed by the cows,	Same as above,	—	1 0 0	1 10 0	—	
Spring Vetches, . .	0 1 33	May, . . .	—	12 stones, .	9 tons, 17 cwt.,	2 15 0	1 15 0	—	
Total, . .	10 2 0								
"STOLEN CROPS."									
Winter Vetches, . .	0 0 25	October, 1853, .	June, . . .	12 stone vetches, &1 stone of rye,	18 tons, 17 cwt.,	2 10 0	6 18 6	—	
Total, . .	0 0 25								

(Signed), PATRICK SHERIDAN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 13, 1855.

ROBERT O'BRIEN, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Limerick Model Farm.

29. LIMERICK MODEL FARM.

January, 1855.

Agricultural Instruction.—No instruction has as yet been imparted beyond the practical operations and management of the farm, as there are no agricultural pupils till the buildings and schools, which are now in progress, shall be completed.

Model Farm.—The farm, which consists of seventy-two statute acres, is situated on the road from Limerick to Foynes, two and a-half English miles south-west from the city, and has an elevation of about eighty feet over high-water mark on the Shannon. It is bounded on the north by the old road from Limerick to Askeaton, and on the east by the ruins of Mungret Abbey, part of which are on the farm. It was purchased in the Incumbered Estates Court in 1851, and was formerly held by six tenants; one holding being fifty-two acres, and the other five averaging four acres each. For the sake of reference I shall call the large farm A, and the small ones, in the aggregate, B. The former was all in grass when I came here, and it being then too late to prepare lea for oats it was allowed to remain so, and was pastured with sheep and young stock purchased by the Commissioners. The latter, which, with the exception of two and a-half acres, was all very poor exhausted stubbles, was allocated for cultivation; and with much difficulty (owing to a long continuance of dry spring weather succeeding a very wet winter, and to the *trespass* of cattle which consolidated the ground,) and proportionately large expenditure, I prepared 12A. 1R. 20P. for the following crops, which were got in in good time, and in the following order:—

	A.	R.	P.	
Oats, . . .	3	2	20	finished on the 20th of April.
Potatoes, . .	0	1	10	,, ,, ,,
Flax, . . .	1	0	0	,, 6th of May.
Barley, . . .	0	2	0	,, 12th ,,
Mangels, . .	1	0	0	,, 14th ,,
Swedes, . .	3	2	0	,, 21st of June.
Globe varieties, .	1	1	10	,, 1st of July.
Vetches, . .	0	2	0	sown at intervals.

The season being favourable to late sowing, all the foregoing did well, except the potatoes, which were far too late, and nearly cut off by the disease in the end of July. The Swedes were sown at intervals of a week, (as the ground could be got ready) from the 19th of May to the 21st of June. The late sowing was the best; and all those sown before the first of June were inferior to those sown from that to the 21st. I should add that the rains in the end of May and beginning of June facilitated the preparation of the ground, and enabled me to get it to a proper tilth: to this I attribute the difference in favour of the late sowings. This portion (B) being well situated for two divisions of the Four-course Rotation, I cropped the stubble fields in such a way that all the green crop ground be together in one of the new divisions, and sown with grain and grass seeds this year.

Permanent Improvements.—There is no drainage required on this portion of the farm; but on the farm marked A, there is a great deal of other improvements to be effected in removing old unsightly fences, approaches, houses, &c. There are also a great many "boulders" to be removed, together with the uppermost layers of the rock (mountain limestone) which protrudes to the surface in many places. The fences are all of stone, which will have to be carted a long distance, a circumstance that will add very materially to the expense. I am engaged in the work at present, and expect to have it all finished about the first of April. The quantity of ground reclaimed and brought under cultivation, with the expenses incurred, &c., will fully appear in my next Report.

The permanent improvements required on the portion A, containing fifty-two acres, are similar to those already detailed, with the addition of drainage. The undrained part of A, besides its being in the centre of the farm, and in front of the buildings, has a concave surface, the centre being eight feet lower than the outlet, and thirty-six lower than the site of the building ground. A large open dike, which was intended as a main drain and outlet, runs through it, and will answer the purpose well; but it will require to be deepened three and a-half feet from the point X, or first parallel drain, to a distance of forty perches beyond the boundary. Some parts of it are already from five to eight feet deep, and have been excavated out of the rock, so that the additional deepening will be expensive; however, if this was well executed, the drainage of the whole (about ten acres) would be most easily and cheaply effected.

Live Stock.—The stock was purchased in the early part of the season, and consisted of forty-one yearling heifers, twenty-nine hoggets, two draught bullocks, and one horse. The yearlings and hoggets were selected at the Munster fair, and were the best offered for sale. Five ewes and a ram of the improved long-woolled Leicester breed, were purchased from Mr. Rait, and added to the flock in September. In November, twelve of the heifers were selected for being retained as *dairy* stock. The twenty-nine sold left the sum of £1 12*s.* 6*d.* per statute acre for their half-year's grass. This was far too little, and may be thus accounted for. When the land was purchased in 1851, about twenty acres around the Abbey, the prime of the whole farm, were in a neglected and worn out stubbles, in which they have remained up to the present; so that instead of grass it produced but a variety of noxious weeds which, while they indicate its present foul state, show the natural fertility of the soil.

The undrained portion (about ten acres) gave a miserable yield; and thus more than one-half of the grass land was of the most worthless description, and will continue so until properly improved.

Manures.—Not having any farm-yard available, the following *portable* and *artificial* manures were applied for the green crops, viz.:—Peruvian guano, Irish peat guano, vitriolized bones, and superphosphate of lime; with these the following experiments were made and most carefully attended to:—

No. 1. This experiment was for the purpose of comparing the value of three artificial manures with Peruvian guano. The following are the particulars:—

Date of Sowing.	Distance of Drills.	Distance of Plants.	Name of Turnip.	Quantity and Name of Manure.	Value of Manure.	Produce per Statute Acre.	Value at Market Price.
	inches.	inches.		cwt.	£ s. d.	tns. cwt. st.	£ s. d.
May 19,	27	9½	Skirving's improved Swede,	5 Peruvian guano,	3 0 0	19 10 6	19 10 9
”	”	”	”	12 Irish peat guano,	3 0 0	11 14 3	11 14 4½
”	”	”	”	7½ Vitriolized bones,	3 0 0	15 3 7	15 3 10½
”	”	”	”	7½ Superphosphate,	3 0 0	15 12 4	15 12 6
”	”	”	”	No manure, . .	—	8 18 3	8 18 4½

The vitriolized bones and superphosphate of lime have had been tested with *genuine* Peruvian guano, and therefore the results may be taken as very satisfactory. From Dr. Apjohn's analysis there is no doubt but they may be used to a greater extent for the growth of turnips, and with more certainty than the average of those samples sold under the name of "genuine Peruvian guano." The second experiment was made

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Limerick Model Farm.

later in the season on *potato ground*, with the view of giving the manures a further trial. The vitriolized bones and superphosphate were part of the same samples used in the first experiment, but the guanos were not. The Peruvian was purchased later in the season, at an advanced rate, so that while I reduced the quantity one cwt. per acre, in consequence of it being potato ground, the cost was still the same—a circumstance greatly in favour of the other manures as will be seen from the following table:—

Date of Sowing.	Distance of Drills.	Distance of Plants.	Name of Turnip.	Quantity and Name of Manure.	Value of Manure per Statute Acre.*	Produce per Statute Acre.	Value at Market Price.
	inches.	inches.		cwt.	£ s. d.	tns. cwt. st.	£ s. d.
June 6,	27	9½	Skirving's improved Swede,	4 Peruvian guano,	3 0 0	19 11 6	19 11 9
,,	,,	,,	,,	12 Irish peat guano,	3 0 0	16 4 1	16 4 1½
,,	,,	,,	,,	7½ Vitriolized bones,	3 0 0	19 3 1	19 3 1½
,,	,,	,,	,,	7½ Superphosphate.	3 0 0	19 2 6	19 2 9
,,	,,	,,	,,	No manure, . .	—	11 18 0	11 18 0

* The sum of 15*s.* per cwt. includes the carriage from Dublin.

From the foregoing it will be seen that four cwt. of the Peruvian gave the same return that five cwt. did in the stubbles; while the same quantity of vitriolized bones and superphosphate increased the produce in proportion to the difference in the ground. There is a great difference between the results of the Irsh peat guano in both cases. In the first, it turned out worse than useless; for when compared with the Peruvian it left a loss of £10 12*s.* 4½*d.* per statute acre; while in the second, the loss was only £3 7*s.* 7½*d.* I should add, that though the quantity used in both cases was the same, the samples were different, and when the one that gave the larger return was preparing for use, the escape of free ammonia was so very great that it was almost impossible to stand over it.

No. 3. This had reference to the distance between the plants: and though there is very little difference in favour of nine inches apart, yet, while bulbing, and even up to the day of weighing them, there was apparently a difference of about one-third.

Date of Sowing.	Distance of Drills.	Distance of Plants.	Name of Turnip.	Produce per Statute Acre.
				tns. cwt. st.
June 7th,	27 inches, .	9 inches, .	Skirving's improved Swede,	19 2 6
,,	,,	7 ,,	,,	18 12 0

No. 4. This experiment was made in potato ground, and had for its object to try the effect of an additional quantity of Peruvian guano, per statute acre, at an increased cost of £1.

Date of Sowing.	Name of Turnip.	Quantity and Name of Manure.	Value of Manure per Statute Acre.	Produce per Acre.
			£ s. d.	tns. cwt. st.
June 7th,	Skirving's improved Swede,	4 cwt. Peruvian guano, . .	3 0 0	19 2 6
,,	,,	5⅓ ,, ,,	4 0 0	24 0 3

The foregoing experiments were all on a large scale; there were no blanks either from disease or any other cause; and the turnips were cleaned and made fit for the market—circumstances that add greatly to their value.

Nitrate of soda was used as a top-dressing for oats, at the rate of one cwt. per statute acre, which cost twenty-four shillings. Instead of applying it all in one field, I used some in each, and only to every second ridge throughout the whole. In this way the effect was very striking. The oats thus dressed were grown in *stubbles*, adjoining some grown in potato ground, and at the time of dressing (the middle of July) appeared very poor and badly coloured.

The weather being moist and continuing so, the effect was perceptible in a few days; but in three weeks there could be no difference seen between those top-dressed oats and that in the potato ground, and eventually both gave an equal return.

The flax, when in flower, was pronounced excellent by Mr. Orr, the "Royal Flax Improvement Society's" instructor. It was saved on the "Courtrai system;" and when I offered the dried well-saved straw for sale at Messrs. Russel's factory, I could only get at the rate of £3 per ton, their highest price. Mr. Orr, who buys for the factory, says flax is not bringing as high a price at present as it did during the last few years, which is owing to the state of the linen trade. It is certain, from the advanced prices of all kinds of farm produce, and the difficulty of getting a good market for flax, that it cannot be grown with profit in many districts, beyond the *domestic wants* of the producers. I am aware of the great value of the seed which seems to be its principal recommendation.

Balance Sheet.—The sum £79 8*s.* 11½*d.* was paid for labour, and entered under that head. This includes two items—£58 18*s.* 3½*d.* for the ordinary cultivation of the farm, and £20 10*s.* 8*d.* for permanent improvements.

JOHN KENNY, Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Limerick Model Farm.

SUMMARY of the YEAR, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year, ...	—		
" Paid for Labour, ...	79	8	11½
" Free Labour of Pupils, . . .	—		
" Paid for Farm Seeds, ...	12	11	11½
" " Manures, ...	22	14	9
" " Cattle, ...	338	15	0
" " Feeding Stuffs, . . .	6	15	11
" " Implements and Repairs, . .	32	17	8
" " One year's Rent of Farm, . .	70	15	0
" " " Poor Rate, . .	2	7	1
" " " County Cess, . .	3	9	5½
To Profit and Loss for balance, being gain on the year, .	35	3	3
	£604	19	0½

Cr.

	£	s.	d.
By amount received for Grain, ...	19	3	6½
" " Roots, &c., . . .	1	9	8
" " Cattle Sold, . . .	152	17	4
" " Wool, ...	7	18	0
By Inventory and Valuation taken at close of the year, .	405	18	6
By proportion of permanent improvements, one-tenth of which is to be carried to each of the nine succeeding years, ...	17	12	0
	£604	19	0½

TABLE showing the CROPPING of the Limerick Model Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 1 10	3rd week in May,	October,	12 cwts.,	2 tons, 8 cwts.,	8 10 0	1 2 0	—	This crop was sown too late and consequently much diseased.
Turnips, Swedes,	3 2 0	20th May to 20th June,	December,	6 lbs.,	16 tons,	7 7 0	4 13 0	—	The land for the green crops was very much exhausted and got no winter preparation: this accounts for the low produce.
Turnips, Aberdeens,	1 1 10	4th week in June,	December,	5 lbs.,	18 tons,	6 6 6	2 13 6	—	
Turnips, White globe,	0 2 20	1st July,	Fed off,	5 lbs.,	14 tons,	6 6 6	0 13 6	—	
Mangels,	1 0 0	14th May,	December,	6 lbs.,	15 tons,	8 1 0	2 19 0	—	
GRAIN.									
Oats,	3 2 20	3rd week in April,	1st September,	14 stones,	10 barrels,	5 17 6	4 14 2	—	
Barley,	0 2 0	16th May,	2nd week in Sept.,	12 stones,	6¼ barrels,	5 17 6	—	0 13 0	
Flax,	1 0 0	6th May,	15th August,	3 bushels,	2¼ tons,	6 18 6	0 11 0	—	The Flax is on hand, and the produce estimated at the market price—equal 3*s.* 4*d.* per cwt. for the straw.
GRASS.									
Vetches,	0 2 0	May,	Fed off,	3 bushels,	Not ascertained,	7 12 0	—	—	
Under grass, old buildings, fences, and waste,	58 1 20	—	—	—	—	1 2 6	0 7 6	—	About fifteen acres were in exhausted stubbles three years, and have been left so. It is now worthless pasture, though the ground itself is of the best quality.
Total,	73 3 0								

(Signed), JOHN KENNY, Teacher.

9th January, 1855.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballycarry Model Farm.

No. 3. REPORTS ON ORDINARY AGRICULTURAL SCHOOLS.

1. BALLYCARRY ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Antrim.

January 8, 1855.

Agricultural Instruction.—There have been no agricultural boarders yet admitted, from the circumstance that some additional apartments required for their accommodation have not been completed.

The Agricultural Class comprises the senior division of "sequel," with the "third," "fourth," and "fifth classes." As in other localities, the former fluctuates, according to the average attendance of the school. During the year the daily average of the school has been fifty-four, while the daily average of the agricultural department has been so high as twenty-eight, showing that the desire for obtaining agricultural instruction is evidently on the increase. It is a fact that all the boys who have obtained situations during the year out of this school were decidedly the most proficient in agricultural science. This corroborates testimonies, given both here and elsewhere, respecting the propriety of making all our pupils thoroughly acquainted with agricultural knowledge. About three-quarters of an hour daily is devoted to the agricultural instruction of this class in the school; while the time usually allowed for recreation and amusement is generally appropriated to affording them practical instruction on the farm, in the work of which they cheerfully assist.

The Industrial Class still continues efficient. Its members are regular in their attendance to their school and farm duties, and seemingly vie with each other in performing their work with taste, neatness, and skill. I may here mention that the new line of road now in course of progress from Carrickfergus to Larne has increased the demand for labourers in this locality, which, coupled with the present high prices of provisions, has caused many young lads to seek employment, when they would otherwise be at school; and the wages available are so high, that most boys, who could only drive a horse from the quarry to the road, met with ready employment at from 3*s.* to 5*s.* per week; and a large number of our lads were engaged in this most useful work; still, the places have been supplied by others, who, although not just so strong, are fast acquiring dexterity in manual labour.

Cultivation of the Farm.—I rejoice to inform you that all our crops were abundant. The wheat and oat crops were very superior, both in quantity and quality. Early in spring I sowed three quarters of a cwt. of wheat, the produce of which was one ton sixteen cwt. to the Irish acre. The grass crop was cut four times during the season. The quantity of land under this crop was only about an Irish acre and ten perches, and on this space we kept two milk cows, a donkey, and a calf, besides giving a quantity of the clover to the pigs daily, upon which they throve remarkably. The potatoes were a better crop than generally grew in this neighbourhood, arising chiefly from early planting. The crop was got down in February and March, and, consequently, they were at maturity ere the blight came on. I may here remark that there is a general outcry against extensively planting potatoes in this neighbourhood; in future I trust that farmers will not soon forget their resolution, of not depending much on such an uncertain crop. The parsnips were very productive. I would most strongly advise their more extensive cultivation, having now grown them successfully for years, I can most confidently recommend them. The greatest obstacle I find to their thorough success, is the difficulty of obtaining pure seed; this can but rarely be obtained, except by the grower trying to save his own seed, as, unlike most other plants, the seed will not vegetate if more than a year old. The carrots were almost wholly destroyed by the slug and wire-worm, and a second sowing suffered from the same cause; but we have excellent mangel, that was transplanted in their place. Turnips and mangel both proved remunerating crops.

Live Stock and Dairy Management.—The live stock are all house-fed, summer and winter, and, from past experience, I see no reason to relinquish this method; the cows are all in as healthy a state as if they were pastured outside. I can keep more than twice the stock, according to this system, than those who follow the grazing plan, while the quantity of manure collected for maintaining the fertility of the farm is quadrupled; and I have no hesitation in affirming that if the cows are skilfully attended, carefully cleaned, and kept contented, they will give more milk and butter during the *whole* year than under the old system. The gross receipts arising from the dairy department has been £30 10*s.* during the year. Much care has been bestowed on the feeding and management of pigs; in February, 1854, I purchased a fine Berkshire sow for £5; she farrowed in about three weeks afterwards, and brought forth nine pigs; the amount realized for seven of those paid for the purchase of the dam. The total amount received for young pigs and pork during the year was £20 17*s.* 8*d.*; of course, the attendance and feeding required considerable care and expense, but for these I was amply remunerated.

Manures.—The greatest economy is used in the collecting of this useful article. All the farm-yard refuse, and slops from the scullery, are conveyed to the tanks, which are kept filled with weeds, earth, or peat bog-mould, which, as soon as completely saturated, are added to the manure heap. Occasionally, it is watered from the tanks, which tends to enrich its quality, as well as increase its quantity. We cart out the manure, about three times during the year, to the field designed for "green fallow crops;" and then, as soon as the heap is made up, we immediately water it. This process I consider of great importance, as the manure would otherwise lose by evaporation. The manure is dug into the ground designed for carrots and parsnips, during the months of December and January; by this process it becomes evenly incorporated with the soil, and acts in destroying noxious substances, so detrimental to those seeds that require early sowing, and which lie so long in a dormant state ere vegetation appears perceptible. For the same reason, land intended for leeks, onions, &c., requires to be treated in a similar manner, and a little additional manure should be given at the time of sowing, in order to stimulate the process of speedy vegetation. No portable manures were bought during the year, except about three-quarters of a cwt. of guano, which was applied in order to ensure a speedy braird of the turnips, a great part of which were sown in July, after a stolen crop of winter vetches. The latter produced at the rate of thirty-five tons fifteen cwt. to the Irish acre. They got a top-dressing from the tank in February, which proved very effective.

Permanent Improvements.—Since my last report the farm house and yard have undergone considerable improvements, in order to give increased accommodation for boarders, a few of whom can now be accommodated with study and sleeping apartments, and I hope the places so available will be speedily filled up.

Agricultural improvement is gradually gaining ground in this locality. The farmers of Broadisland, Carrickfergus, and Carnmoney, evince both taste and skill in the management of their farms. Still, one thing,—one of the most important items of improved farming, viz., "house-feeding,"—is sadly neglected; while, farther inland, we find but little

APPENDIX I. — II. Appendix to Dr. Kirkpatrick's Report. — *Ballycarry Model Farm.*

attention paid to carrying out a proper rotation of cropping. The farmers occupying from five to ten acres are seemingly the most disposed to follow our example. Winter vetches and rape are more extensively sown among these small farmers.

Concluding remarks.—Towards the latter end of 1853, I forwarded to Dr. Hodges a sample of soil and subsoil, from a section of the farm upon which six or seven grain crops had been taken, without much decrease in produce; prior to the time, I found it convenient to manure it in my rotation for green crops; but, as the result did not reach me until after my Report for 1853 was sent to the office, and as it is of a most interesting nature, I take the opportunity of forwarding the analyses in this Report.

Laboratory of the Chemico-Agricultural Society,
January 17, 1854.

DEAR SIR,—I enclose a statement of the composition of the samples of soil and subsoil you have forwarded from Ballycarry Model Farm. The analyses clearly show the cause of the long continued fertility of the field. Both the soil and subsoil are even yet richly furnished with all the materials required to nourish plants.

	Active soil.	Subsoil.
1st. By washing:—		
Clay and organic matters,	68·50	38·70
Coarse sand,	31·50	61·30
	100·00	100·00
2nd. By analysis:—		
Organic matters,	14·60	8·89
Oxide of iron,	13·94	17·01
Alumina,	9·38	5·21
Carbonate of lime,	2·45	0·35
Phosphate of lime,	0·08	0·06
Sulphate of lime,	0·30	0·13
Carbonate of magnesia,	0·24	0·09
Chloride of sodium,	0·25	0·18
Chloride of potassium,	0·12	0·06
Insoluble siliceous matters,	58·86	67·78
	100·22	99·76
Water in samples when received	26·60	29·32

J. F. HODGES, Chemist.

Mr. M'Kee, Ballycarry Model Farm.

The school has enjoyed a fair amount of prosperity during the year, arising from the course of instruction given being at once both extensive and systematic. That I am verified in the remarks now made will be apparent from the success attending my labours; no fewer than six boys, four of whom wrought on the farm, have obtained very respectable appointments out of this school within the last six months, while three more are now prosecuting the study of Latin and Greek under me, with a view to graduate in some of the Queen's Colleges.

I beg to submit the following extracts from the Report Book, showing the favourable opinion entertained by visitors, as to the efficiency with which both departments are conducted:—

April 3rd, 1854.—Visited, and am satisfied, from a brief examination in geometry, the pupils are making progress; and the good order of the school was manifest.

The boys were examined in grammar. In this department they gave evidence of a hopeful advancement.

G. BARUBY,
18, Canterbury-place, Lambeth.

April 11.—Visited this school to day, and found all things in their accustomed regularity. Examined some boys in geometry and algebra, and am glad to see an advance in these branches. One boy reading Latin; appears to be well grounded, so far, in the principles of Latin.

THOMAS O'GORMAN, Presbyterian Minister.

July 31.—Visited the school to day, and am much gratified at the answering in agriculture, as well as with the general order and regularity of the school.

G. T. PAYNE, Rector.

Many more testimonials might be forwarded, but I consider the above fully corroborate the statements I have made in this Report.

MATTHEW M'KEE, Agricultural Teacher.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballycarry. Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of Year,	103	16	9½
" Paid for Labour,	12	10	10½
" Free Labour of Pupils,	5	4	0
" Paid for Farm Seeds,	5	12	9
" " Manures,	2	14	0
" " Cattle,	20	0	0
" " Feeding Stuffs,	1	15	0
" " Implements and Repairs,	0	18	5
" " One Year's Rent of Farm,	*10	0	0
" " " Poor Rate,	—		
" " " County Cess,	0	16	6
To Profit and Loss for balance, being gain on the year,	35	0	10½
	£198	9	2½

Cr.

	£	s.	d.
By amount received for Grain,	23	0	6
" " Roots, &c.,	14	5	4
" " Cattle Sold,	34	4	0½
" " Dairy Produce,	30	7	1
" " Eggs and Poultry,	2	5	2
" Miscellaneous,	0	10	1
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	93	17	0
	£198	9	2½

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* In this Item there is reckoned £1 which I paid for heifer's grass.

TABLE showing the CROPPING of the Ballycarry Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.				tons cwt. qrs. lbs.	£ s. d.	£ s. d.	£ s. d.	
Mangels,	0 1 34	May and June,	December,	6 lbs.,	17 18 1 0	10 17 6	15 12 0	—	I consider the superiority of the crops generally owe their luxuriance to the benefit they derived from liquid manure.
Swede turnips,	0 0 30	May,	December,	7 lbs.,	20 2 0 0	10 14 2	9 7 10	—	
Aberdeen do.,	0 1 27	July,	December,	7 lbs.,	18 1 1 0	10 15 5	7 5 7	—	
Parsnips,	0 0 7	March,	December,	4 lbs.,	9 18 3 0	13 13 0	19 7 0	—	Parsnips should be more commonly cultivated; their culture would benefit the community generally.
Cabbages,	0 0 27	January, Feb., March,	As required,	6,997 plants,	30 2 2 0	10 14 1	18 9 0	—	
Vetches, *alias* turnips,	0 1 0	July,	December,	4 bushels per acre,	22 7 3 7	5 10 0	3 19 6	—	
Potatoes,	0 3 14	February and March,	As used,	Turnips, 7lbs. per acre	16 2 2 0	8 17 6	4 10 6	—	
				Potatoes 20 cwt. „	6 1 1 0	10 14 1	9 5 11	—	
Carrots, *alias* mangels,	0 0 8	March and June,	December,	Carrots, 8lbs. per acre,	Not taken,	10 10 0	—	Loss.	
				Mangels, ordinary distance,	12 1 1 0	—	7 11 6	—	
Caraway seed,	0 0 3	Sown previous year.	—	—	—	—	—	—	
Leeks and onions,	0 0 6	April,	As required,	Not taken into account.	Not taken,	8 19 0	—	—	
GRAIN.									
Oats,	2 1 0	April,	September,	1cwt., 2qrs., 12lbs.	1 5 3 19	5 11 9	8 8 3	—	Kinds of oats sown were old Poland and English Blantyre.
Wheat,	0 2 28	March,	September,	11 stones, 3 lbs.,	1 5 3 0	5 14 0	13 12 3	—	
GRASS.									
Italian rye and red clover,	1 2 37	April, 1853,	As required,	2¼ bushels,	14 1 1 27	2 18 6	8 1 6	—	This was considered the best crop in the neighbourhood.
				12lbs. Red clover	4 cuttings,	—	—	—	
Roads and avenues, and mearing ditches,	0 0 39	—	—	—	—	—	—	—	
Total,	7 1 20								* Weight given above in No. 6, "Green Fallow Crops."
"STOLEN CROPS."									
Vetches,	0 1 0	October,	June and July,*	—	—	—	—	—	"Stolen Crops," if tried, will, I am persuaded, repay the cultivator the expense of cultivation, and generally, the rent of the land on which they grow: in proof of this read my letter on the growth of vetches, published in the *Banner of Ulster*, June 14, 1854.
Mangels, after rape,	0 0 16	Transplanted in June,	Rape cut in May, Nov., and Dec.,	Not taken into account.		—	—	—	
Cabbages in turnip ridges and potato furrows,	0 3 35	April, June, and July,	As required,	5,558 plants,	7 10 0 0	—	—	—	
Celery, after potatoes,	0 0 3	March, 1853,	Not yet used,	—	Used as required.	—	—	—	
Cabbage plants,	0 0 6	August,	Not yet disposed of.	—	—	—	—	—	
Total,	1 1 20								

(Signed), MATTHEW M'KEE, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief,

JAMES WRIGHT, Manager.

13th January, 1855.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Taniokey Model Farm.

2. TANIOKEY ORDINARY AGRICULTURAL NATIONAL SCHOOL, Co. Armagh

December, 1854.

Agricultural Instruction.—We have no boarders. The "agricultural class," consisting of the fourth, third, and sequel classes, numbers twenty-eight, which is an increase of seven over last year. They seem to take an interest in the study of the agricultural books; and receive agricultural instruction from half-past two till three o'clock, on five days in the week. They receive practical instruction on the farm. I have no paid industrial class.

Model Farm.—As stated in my last report, the farm was in a very bad state of cultivation when it came under my care. I have since drained about the one-half of it, and purpose to complete the remainder of it next year. I have got the four-course rotation nearly established, and I intend to adhere to it, as I consider it the best adapted for small farms and house-feeding, as well as for keeping up the fertility of the soil. The profits seem small, but this is owing to the exhausted state of the farm, which requires much labour and manure to render it fairly productive. I had all the space intended for green crops turned up deeply, early in autumn, last year. My green crops exceeded any in this locality; as a proof of which, I got the highest premium in this class at the exhibition of the "Drumbanagher and Acton Farming Society."

Live Stock.—I kept four head of black cattle, which I fed about two-thirds of the time in the house; by which system I find that my cows produced more milk and butter than if depastured, and are in much superior condition, as I received a premium for them, and also for butter.

Manures.—The manure heap is made up of farm-yard manure, weeds, night-soil, and mould, or earth, in alternate layers, and dressed up, and saturated with liquid every week. Owing to the small produce from the farm last year, I had to purchase a quantity of guano, which I applied to my green crop, and which repaid me well. I put about two-thirds farm-yard manure, and one cwt. of guano per acre.

Permanent Improvements.—These consisted in draining and buildings; the buildings were erected by Colonel Close, and consist of a very fine byre, on the improved plan; it is sixteen feet square, and will accommodate four cows, besides having a loft above for hay, straw, or seeds, &c.; a barn, piggery, and yards, stable, boiling and poultry houses, and some other minor improvements.

Progress of Agricultural Improvement.—Agriculture is in a progressive state in this locality. Colonel Close's property is a model to the greater part of this province, as every one that has gone over it can testify. Colonel Close wishes to be among the foremost in promoting every good work that tends to the comfort and prosperity of his tenantry. He has been at great expense to afford their sons an opportunity of becoming acquainted with the improved system of husbandry, &c., from their youth, by combining agricultural with literary education in this school.

W. M'CULLA, Agricultural Teacher.

[SUMMARY, &c.

APPENDIX I.

II, Appendix to Dr. Kirkpatrick's Report.

Taniokey Model Farm.

SUMMARY of the YEAR, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	51	0	6
„ Paid for Labour,	11	12	1½
„ Free Labour of Pupils,	3	0	0
„ Paid for Farm Seeds,	2	12	4
„ „ Manures,	2	12	10½
„ „ Cattle,	12	12	0
„ „ Feeding Stuffs,	2	1	4
„ „ Implements and Repairs,	0	2	8
„ „ One year's Rent of Farm,	13	7	9
„ „ „ Poor Rate,	0	10	7
„ „ „ County Cess,	0	16	6
To Profit and Loss for balance, being gain on the year,	20	6	10
	£120	15	6

Cr.	£	s.	d.
By amount received for Grain,	9	2	3
„ „ Roots, &c.,	1	5	0
„ „ Cattle Sold,	14	14	7
„ „ Dairy Produce,	14	10	2
„ „ Eggs and Poultry,	1	17	1
„ Dairy Produce used by family,	4	0	0
„ Farm „ „ „	3	0	5
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	72	6	0
	£120	15	6

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Taniokey Model Farm.

TABLE showing the CROPPING of the Taniokey Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Turnips,	1 2 0	May and June,	Not all lifted yet,	4 lbs.,	27 tons,	6 15 0	3 5 0	—	The crop was very good. I got the first premium in my class from the Drumbanagher Society for the cultivation and quality of these crops.
Mangels,	0 0 10	4th May,	November,	5 lbs.,	24 tons,	6 15 0	6 5 0	—	This is the acreable profit.
Cabbages,	0 0 20	February and March,	Various,	—	Not calculated,	7 5 0	—	—	An excellent crop.
Potatoes,	1 1 10	February and March,	October,	10 cwt.,	4 tons,	7 5 0	2 15 0	—	About one-third bad ones.
GRAIN.									
Oats,	5 0 0	March,	September,	1½ cwt.,	14 cwt.,	3 15 0	2 11 0	—	A light crop.
Wheat,	0 2 0	November,	September,	8 stones,	8 cwt.,	3 15 0	2 5 0	—	A bad crop.
GRASS.									
Clover & Italian Rye-grass,	1 3 0	March,	Various,	—	—	—	—	—	Cut three times.
Fences, &c.,	0 1 4								
Total,	10 2 4								
"STOLEN CROPS."									
Vetches and Rye,	0 3 10	October,	June and July,	3½ bushels,	Cut green,	4 0 0	—	—	Very good.
Total,	0 3 10								

(Signed), WILLIAM M'CULLA, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

28th December, 1854.

M. CLOSS, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Lough Ramor Model Farm.

3. LOUGH RAMOR ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Cavan.

January 8, 1855.

Agricultural Class.—This class has made a good proficiency according to their attendance at the school; but still there is a great drawback occasioned by their irregular attendance. During the winter quarter, the senior boys of the country attend the school at every opportunity, and show the greatest zeal for improvement. At present there are many of them coming a distance of three miles, which must be an evident proof that they are sensible of the importance of agricultural instruction, and desirous of acquiring a useful education. I trust I shall soon be able to show them that, notwithstanding all the inconveniences that may attend a farm situated like mine, in an almost inaccessible position, and exposed, by aspect and elevation, to all the casualties of climate, &c., which so often mar the labours of the husbandman, that steady perseverance, united to judicious management, will amply repay the industrious farmer.

Model Farm.—From the exhausted state of the farm when I got possession of it, and the difficulty of bringing any manure to it, unless what might be produced on it, I had much difficulty at first, though the produce was in every case increased, yet the supply of manure still continued insufficient. In order to remedy this, I sowed a few "con-acres" of oats last year, for the purpose of having the straw for manure; the rent of which I have added to the rent of the farm, in order to show the actual profit or loss in the balance sheet, but in the returns for the portion of land cultivated as a "Model Farm," I have given only the proportionate amount for that extent. On account of the high price of corn, together with the benefit of manure from the straw, these con-acres will afford a good return of profit.

Live Stock.—The cattle are of the common breed, as my means would not yet allow me to purchase better; this left my profit less in this department; but, though knowing well my own loss, I was not able to remedy the defect.

Manures.—I had the farm-yard manure collected with great care; but, as it was insufficient, I was obliged to purchase guano, which I used at the rate of five cwt. to the acre, for the turnips. I used farm-yard manure on part of the same ground, at the rate of thirty tons per acre, with better success.

Permanent Improvements.—Those executed during the past year consisted of clearing off stones, deepening the soil, erecting suitable offices, and preparing proper receptacles for the manure. These I needed very much; but it is only by slow degrees that a person without sufficient capital can obtain all the facilities necessary for conducting the operations of farming with due success. If I had a few more offices built, I would be able to go on more successfully, and these I intend beginning to erect at as early a period as possible.

Progress of Agricultural Improvement in this locality.—The old system of culture is entirely altered in this district. The farmers have abandoned the injudicious mode of cropping they formerly pursued, and now follow a pretty regular rotation. Though not entirely correct, yet it is a remarkable improvement on the former plan. They cultivate green crops successfully, and many of them have purchased guano this year for their turnips. I am sure that, in a very little time, the advantages arising from an improved system will be abundantly manifest in the country.

PATRICK O'REILLY, Agricultural Teacher.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Lough Ramor Model Farm.

SUMMARY of the YEAR, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	67	10	0
,, Paid for Labour,	32	13	6
,, Free Labour of Pupils,	—		
,, Paid for Farm Seeds,	1	10	2
,, ,, Manures,	1	15	9
,, ,, Cattle,	3	3	6
,, ,, Feeding Stuffs,	0	13	3
,, ,, Implements and Repairs,	0	19	8
,, ,, One year's Rent of Farm,	21	1	4
,, ,, ,, Poor Rate,	0	12	0
,, ,, ,, County Cess,	0	2	7
To Profit and Loss for balance, being gain on the year,	34	19	7
	£165	1	4

Cr.

	£	s.	d.
By amount received for Grain,	25	9	4
,, ,, Roots, &c.,	16	14	0
,, ,, Cattle Sold,	11	12	0
,, ,, Dairy Produce,	8	10	6
,, ,, Eggs and Poultry,	1	8	8
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	101	6	10
	£165	1	4

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Lough Ramor Model Farm.

TABLE showing the CROPPING of the Lough Ramor Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes,	0 1 0	April,	November,	6 barrels,	40 barrels,	7 9 0	8 11 0	—	
Turnips,	0 0 30	June,	November,	3 lbs.,	14 tons,	5 3 6	3 8 6	—	
Vetches,	0 0 10	October,	October,	20 stones,	6½ barrels,	4 1 0	4 19 0	—	Kept for seed.
GRAIN.									
Oats,	1 0 0	March,	October,	14 stones,	13 barrels,	3 5 9	5 9 3	—	
GRASS.									
Clover and Italian,	0 2 0	April,	Various,	1 bushel, and 9 lbs. clover,	Not weighed,	1 5 2	4 4 10	—	Two crops—first for soiling, second for hay.
Total,	2 0 0								
"STOLEN CROPS."									
Vetches,	0 0 30	October,	May and June,	20 stones,	Not weighed,	4 1 0	3 19 0	—	Profit not included in this year's.
Total,	2 0 30								

(Signed), PATRICK O'REILLY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

9th January, 1855.

JOHN O'REILLY, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Balleighan Model Farm.

4. BALLEIGHAN ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Donegal.

January 5, 1855.

Agricultural Instruction.—Agricultural Class.—There are at present thirteen boys in this class, which has been the average throughout the year. They have not increased in number, as compared with the previous year, but, as regards intelligence, they have steadily progressed, the attention to study being quite satisfactory.

Industrial Class.—The number in this class is eight, of whom four are paid by the Commissioners, and four from local sources.

Among the many pleasing indications of improvement which the members of this class have afforded me, there is none more gratifying than the manner in which each has carried out on his own farm at home the lessons of industry which I have endeavoured to inculcate. Two experiments in green crop culture were made by each boy on his father's land, with the view of testing the effects of the different kinds of manure, &c., and the satisfactory appearance of the different little plots reflected much credit on the boys, and proved highly gratifying to the Committee of the school, who inspected them on the first of November.

Model Farm.—If the profitable result obtained be a proper criterion whereby to determine the degree of efficiency with which the cultivation of the Model Farm was conducted during the past year, I am of opinion mine has been very encouraging. The produce from cereal crops was very abundant, and the price very remunerating; more than counterbalancing a defect in the flax and potato crops, which did not succeed so well, though the greatest care was bestowed on their cultivation; but the effects of soil and climate will sometimes produce unfavourable results, which the greatest amount of intelligence cannot foresee, nor the utmost energy prevent. In the cultivation of the several crops, I attempted no new mode of management; my system being that followed by all intelligent agriculturists.

Live Stock and Dairy Management.—I have adopted the system of "house-feeding" the cattle, but allow them, in the summer months, about two hours each day, for exercise on the pasture. They receive six feeds daily in summer, clover and Italian rye-grass being given alternately, with peas, vetches or straw. In winter they get the same number of feeds, each feed of roots being alternated with straw. But here I must remark that I have found a serious disadvantage, arising from diarrhœa produced by turnips, when they form the staple of their diet in the early winter. The difficulty arises in inducing them to consume a sufficient quantity of straw, to counteract the effect produced by the turnips. I, therefore, tried the expedient of rendering the straw more palatable to them, by cutting and infusing boiling water, in which had been mixed a little salt and some oatmeal; the consequence was, that the purging was stopped, and half the usual quantity of roots was found sufficient to keep the cattle in good condition.

Manures.—As I fully explained in my last report, the measures adopted for the purpose of augmenting and retaining the fertilizing properties of the farm-yard manure, I deem it superfluous here to repeat it, my system of management being still the same. As I have found from experience that among all the imported manures which I have tried, there is none equal in efficacy to Peruvian guano, I have not applied any other sort this season; and the result of its application was quite satisfactory, particularly on the turnip crop, which in the early stages of its growth depends so much on the manure, though at a more advanced period of its development, it finds a ready supply in the carbon, which the broad surface of its leaves imbibes from the atmosphere. Hence the advantage of applying the most stimulating manure to impart vigour to it in the early stage of its growth, and thus hurry it forward beyond the reach of its frequently fatal enemies.

Permanent Improvements effected during the year.—Improvements of this kind were executed during the year to an extent which involved a considerable outlay of capital. They consisted in the erection of a barn, stable, and piggery, and the removal of a large bank of earth, which interfered very much with the tidy and orderly appearance of the farm premises.

Progress of Agriculture, &c.—The intelligence of a great number of farmers in this neighbourhood, in a great measure, accounts for the forward state of agriculture. During the last few years, a generous spirit of rivalry has sprung up amongst the farmers of this locality, who strive to excel each other in the growth of green crops, and the rearing of improved breeds of cattle; and so rapidly has improvement proceeded in this praiseworthy direction, that few farms are now to be seen without a large stock of the best description of short horns. There is still, however, much to be done in farm management, but it is merely a question of time.

WILLIAM A. CAMPBELL, Agricultural Teacher.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Balleighan Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	104	13	4
" Paid for Labour,	19	5	3½
" Free Labour of Pupils,	7	16	0
" Paid for Farm Seeds,	6	8	10
" " Manures,	5	2	6
" " Cattle,	1	0	0
" " Feeding Stuffs,	0	6	6
" " Implements and Repairs,	2	13	6
" " One year's Rent of Farm,	12	0	0
" " " Poor Rate,	0	13	6
" " " County Cess,	1	11	7
To Profit and Loss for balance, being gain on the year,	33	12	9½
	£195	3	10

Cr.	£	s.	d.
By amount received for Grain,	42	11	5
" " Roots, &c.,	9	12	3
" " Cattle Sold,	15	5	0
" " Dairy Produce,	15	0	10
" " Eggs and Poultry,	0	16	10
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	112	7	6
	£195	3	10

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Balleighan Model Farm.

TABLE showing the CROPPING of the Balleighan Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips, Swedes, . .	1 0 0	1st week in June, .	December, . .	5 lbs., . .	23 tons, . .	7 14 0	6 2 0	—	
Turnips, Aberdeens, .	0 3 20	10th June, . .	November, . .	5 lbs., . .	22 tons, . .	5 18 0	5 2 0	—	
Potatoes, ...	0 3 20	April, . . .	October, . .	12½ cwt., .	2¼ tons, . .	8 0 0	2 0 0	—	
GRAIN.									
Oats, ...	5 1 20	1st week in April, .	September, . .	13 stones, .	170 stones, .	2 18 6	5 11 6	—	
Flax, ...	1 2 20	4th May, . .	13th August, . .	3½ bushels, .	4 cwt., 8lbs., .	5 7 6	7 2 6	—	
Peas, ...	0 1 0	3rd February, .	July, . . .	9 stones, .	Not estimated,	2 1 6	—	—	
GRASS.									
	1 0 0	Sown with oats, .	—	2 bushels and 10 lbs. clover seed	2 tons, . .	2 1 6	1 15 4	—	
	1 0 0	—	—	—	—	—	—	—	
Total, . .	12 0 0								

(Signed), WILLIAM A. CAMPBELL, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

8th January, 1855 ALEXANDER RINTOUL, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Carradoan Model Farm.

5. CARRADOAN ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Donegal.

January, 1855.

Agricultural Instruction.—As stated in my last report, the pupils composing the "agricultural class" are selected from the advanced classes of the school; but, as their parents have a strong aversion to their children labouring on the farm without remuneration, the course of instruction must, necessarily, be confined to imparting theoretic knowledge in the school. An hour each morning is devoted to reading some of the agricultural works supplied by the National Board, which is explained to them as they proceed, and on which they are subsequently interrogated. When any useful work is in progress, the agricultural class is brought to the farm, which is very convenient, after the ordinary school hours, when they have an opportunity of becoming acquainted with the details of improved practical agriculture. The number varies with the season, from eight to twenty.

Model Farm.—The four-course rotation is still followed, as being the best suited to the state of the farm. The profits for the year (£6 4*s.* 6*d.*) would have been considerably larger, but for spring frost, followed immediately by a parching drought, which penetrated so deeply into this light and unconsolidated boggy soil, as to completely destroy many of the young plants, thereby reducing the produce of most of the crops, especially the potatoes, carrots, parsnips, vetches, and flax. From the situation of the farm, and the nature of the soil, there will be always such a risk. (See last Report.)

The amount received for grain will appear large, but when it is seen that the value of flax and hay is included, it will make the account satisfactory.

Live Stock, &c.—The live stock supported during the year consisted of two cows, two heifers, one calf, and four sheep; two pigs were also kept during part of the year. More stock are on hand, but, as I occupy another small farm, not in connexion with the model farm, they are supported on it; and if they get any support from the model farm credit is taken for same; or, if stock on model farm get any from it, the former is debited under head "Feeding stuffs." The cattle are wholly house-fed in winter, and partially in summer; when the weather is favourable they are allowed the range of an adjoining mountain, part of which belongs to the farm. Most of the dairy produce is used by my family; and in feeding pigs and calves, the buttermilk is used; that used by family, charged at usual market price.

Manures.—These are collected and applied as mentioned in last report; the liquid manure and gases prevented from escaping, by mixing with a compost of bog peat, farm rubbish, and sea sand. The result of mixing with sea sand is most favourable; the crops raised being much heavier than those raised without mixing it, especially the grain and grasses.

No permanent improvements of consequence were required on the farm last year. A range of small sheds containing piggery, calf-house, &c., is in progress of erection in the farm-yard.

Very considerable improvements have been effected in this locality, by way of thorough drainage and reclamation, though the mountainous appearance of the country makes it still exhibit a bleak and unimproved appearance. It is still very difficult to convince the people of the advantage of substituting a proper rotation for a succession of grain crops, though the contrast between the quantity of green crops, raised for cattle feeding now, and that raised a few years ago, is very striking.

ANDREW CAMPBELL, Agricultural Teacher.

SUMMARY of the YEAR, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	45	8	0
" Paid for Labour,	15	1	8
" Free Labour of Pupils,		—	
" Paid for Farm Seeds,	4	16	11½
" " Manures,		—	
" " Cattle,	1	2	6
" " Feeding Stuffs,	3	17	0
" " Implements and Repairs,	0	14	6
" " One year's Rent of Farm,	2	15	0
" " " Poor Rate,	0	3	0
" " " County Cess,	0	6	8
To Profit and Loss for balance, being gain on the year,	5	5	6½
	£79	10	10

Cr.

	£	s.	d.
By amount received for Grain,	18	5	5½
" " Roots, &c.,	5	13	10
" " Cattle Sold,	3	17	6
" " Dairy Produce,	5	2	10
" " Eggs and Poultry,	1	18	4½
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	44	12	10
	£79	10	10

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Carradoan Model Farm.

Table showing the Cropping of the Carradoan Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 2 34	18th and 20th April,	2nd week in Nov.,	10 cwt.,	3 tons,	5 0 0	2 1 6	—	This, as well as almost all the crops, suffered much from the penetrating drought of May, which entered deeply into such a light soil, and injured either the seeds or young plants.
Turnips, Swedes,	0 2 0	2nd May,	December,	5 lbs.,	19 tons,	5 10 0	7 17 0	—	
Carrots,	0 0 10	1st May,	October,	6 lbs.,	Weight not taken, both almost a missed crop,	4 1 0	—	4 0 0	
Parsnips,	0 0 10	1st May,	October,	6 lbs.,		4 1 0	—	4 0 0	
Vetches,	0 0 26	21st March,	Cut in July,	4 bushels,	Weight not taken,	1 4 0	—	0 13 6	Injured by frost in spring—value for about £3 per acre for soiling.
Flax,	0 2 10	10th April,	3rd August,	24 gallons,	3 cwt. 2 qrs.,	4 2 0	3 12 6	—	This injured by frost also.
GRAIN.									
Oats,	1 2 28	25th March,	Last week in Aug.,	14 stones,	90 stones,	2 6 0	0 14 6	—	Angus.
GRASS.									
Clover & Italian rye-grass,	1 0 32	1st week in April,	Part used in soiling in June, and part made into hay in July,	2 bushels rye-grass, & 10 lbs. red clover,	3 tons, 15 cwt., at average weight of hay	0 19 6	6 0 0	—	Most of this crop was late for soiling, and made into hay.
Total,	4 3 30								A garden of 30 perches is not taken into account, as it was principally occupied with cabbages and vegetables for use of house.
"STOLEN CROPS."*	—	—	—	—	—	—	—	—	*This farm suffers so much from frost in winter, that no Stolen Crops succeed in it. (See Report.)

(Signed), ANDREW CAMPBELL, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 8, 1855. THOMAS BATT, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Crislagh Model Farm.

6. CRISLAGH ORDINARY AGRICULTURAL SCHOOL, Co. Donegal.

January 6th, 1855.

Agricultural Instruction.—The "Agricultural Class" consists of from ten to twelve day pupils, who receive theoretic instruction in the Agricultural Books for half an hour daily, and practical instruction on the farm during another half hour. I use every exertion to make its members contribute to the support of our system, by showing that any out-door exercise or in-door instruction in the elementary principles of agriculture serve only to aid their intellectual powers in mastering those literary acquirements their parents wish them to obtain.

On reference to my last Report it will be seen that no office-houses were then available, which defect I would have been unable to remedy were it not that J. P. Kennedy, Esq., (through the representation of Mr. J. Moore, of Loughash, on whose assistance I relied with confidence), appropriated two acres additional land, with offices thereon, to assist in promoting greater efficiency and success. A portion of this additional land requires reclamation, which I expect to effect as soon as possible; and as the public road separates it from the original farm, I intend to establish the three-course rotation on it next year. The produce of both has been unavoidably intermixed for the past year, which accounts for the disproportion in the quantity of land under each crop in the Statistics.

On the land allocated as a model farm for the past year, I have followed the four-course rotation. The portion occupied by green crops was thorough drained, and trenched after the plough to the depth of eight inches, removing all stones met with in the operation. It received the necessary ploughings and cleaning, after which the potatoes and turnips were sown at the proper season. The produce of the former was fair when compared with the general crop of the locality, but neither was as productive as might be expected. The fact was, that my compost manure was barely sufficient for the potatoes, so that I was obliged to use guano mixed with peat charcoal for the turnips. They grew at first vigorously, but subsequently declined when the effect of the small allowance of manure became exhausted.

Live Stock.—The stock at present on the farm is only one cow, and one heifer; but as I have recently got office-houses, I hope in future to follow the system of house-feeding the cattle, and to realize the benefits that accrue therefrom.

JAMES HANAGAN, Teacher.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Crislagh Model Farm.

SUMMARY of the YEAR, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	5	13	0
" Paid for Labour,	5	8	4
" Free Labour of Pupils,	0	15	0
" Paid for Farm Seeds,	2	17	5
" " Manures,	1	11	0
" " Cattle,	12	15	6
" " Feeding Stuffs,		—	
" " Implements and Repairs,	0	4	0
" " One year's Rent of Farm,	3	3	0
" " " Poor Rate,	0	6	6
" " " County Cess,	0	13	3
To Profit and Loss for balance, being gain on the year,	7	5	0
	£40	12	0

Cr.

	£	s.	d.
By amount received for Grain,	6	0	0
" " Roots, &c.,	2	0	0
" " Cattle Sold,	6	8	0
" " Dairy Produce,		—	
" " Eggs and Poultry,		—	
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	26	4	0
	£40	12	0

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Crislagh Model Farm.

TABLE showing the CROPPING of the Crislagh Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes, ...	0 1 35	March and April, .	August, . .	76 stones, .	2¾ tons, . .	5 0 0	3 9 6	—	
Turnips, ...	0 2 35	Last week of May to middle of June, .	Winter, . .	3 to 4 lbs., .	10 tons, . .	—	—	—	The failure in this division was owing to an inadequacy of manure.
Flax, ...	1 0 30	8th May, . .	15th August, . .	30 gallons, .	2 cwt., . .	7 0 0	—	2 0 0	A very inferior crop, which is mainly attributable to the seed bed being too level.
GRAIN.									
Oats, ...	2 2 15	Last week of March, and 1st of April, .	August and Sept., .	20 stones, .	100 stones, .	3 0 0	6 0 0	—	
GRASS.									
Spring Vetches, . .	0 3 5	1st April, . .	August and Sept., .	10 stones, with some oats,	Not ascertained,	—	—	—	Substitutes for cutting grass.
Unreclaimed pasture, .	1 0 0	—	—	—					
Total, . . .	6 3 0								

(Signed), JAMES HANAGAN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 7, 1855. BERNARD M'ELDOWNEY, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Ballyougry Model Farm.

7. BALLYOUGRY ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Londonderry.

January, 1855.

Agricultural Instruction.—We have no "Boarders" nor "Industrial Class" connected with the school, which is a great disadvantage in many respects. The Agricultural Class is composed of the advanced boys of the third and fourth classes, and the attendance has not varied much during the past year: although several members of it have removed from the neighbourhood, others have entered to fill their places, so that the number receiving agricultural instruction is as large as at the commencement of the year. The progress of the class has been pretty fair, when we take into account the irregularity in attendance of many of its members during the throng seasons of the year. The increased demand for and value of labour are great temptations to parents to detain their children at home at these seasons, either to employ them at their own labour, or hire them to others at from three to four shillings per week. This is a strong inducement to the labouring part of the community to deprive their children of the advantages of regularity of attendance at school, and greatly retards their progress both in literary and agricultural knowledge.

Model Farm.—I have been very successful in the cultivation of most of the crops grown on the model farm during the past year. The clover and grass used as soiling were a very superior crop. After the first cutting I top-dressed a part of it with liquid manure from the cow-house. The second cutting of this part was much heavier than the first, and it produced a pretty fair third crop. The Swedish turnips were a good crop, but inferior in produce to former years, which is the case in this part of the country generally this season. After the winter vetches were cut, the ground received four ploughings and harrowings, &c., to prepare it for Aberdeen turnips. I effected a considerable saving in the cultivation of the turnip crop this season, by using the drill harrow instead of the hand-hoe. I harrowed them thoroughly before the plants were singled out, and continued to harrow them occasionally in dry weather as long as the pony and harrow could pass through the drills without injuring the plants. This, with a little hand-weeding *between* the plants kept them perfectly clean, and the soil open for the admission of heat, air, and moisture. I planted twenty-five statute perches of cabbages, which proved a very heavy and valuable crop, some of them weighing as much as seventeen and eighteen pounds. They supplied us with a large quantity of very nutritious food for the cattle.

Live Stock and Dairy Management.—The stock has been free from disease during the year, which is very fortunate, pleura-pneumonia being so prevalent. The butter was sold fresh in Derry, as it generally brings a higher price than when cured; two calves have been reared during the year, and the pigs consumed a considerable quantity of milk. This makes the income derived from the dairy stock appear less than it really was. The cattle are "house-fed" during the year. They are driven out to a rough hill used as a paddock a few hours daily in suitable weather. Our pigs still continue to be a source of considerable profit.

Manure.—The manure from the cow-house and stable are mixed with vegetable refuse and earth in alternate layers. This prevents any waste during the process of decomposition. Formerly I had a supply of peat mould, but that privilege has been withdrawn, as the bog is about to be reclaimed by the proprietors, the Honourable the Irish Society.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballyougry Model Farm.

To the Swedish turnips I applied Peruvian guano at the rate of about four cwt. per acre, with the very best effect.

Permanent Improvement.—The only permanent improvement effected during the year was the removal of a great many large stones from the ground intended for the green crops.

Agricultural improvement is steadily progressing in this neighbourhood. There are several gentlemen who take a great interest both in improving the breed of their cattle, and also in properly cultivating their farms. Our example is more likely to be followed by our humble neighbours, whose means of cultivation nearly resemble our own, and I trust it has stimulated many of the better class to improved management in the cultivation of their farms.

ROBERT HARVEY, Agricultural Teacher.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballyougry Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year, ...	71	17	8
" Paid for Labour, ...	6	4	8½
" Free Labour of Pupils, . . .	0	10	0
" Paid for Farm Seeds, . . .	4	1	0
" " Manures, ...	0	17	5
" " Cattle, ...	1	6	0
" " Feeding Stuffs, . . .	5	0	6
" " Implements and Repairs, . .	0	16	6
" " One year's Rent of Farm,* . .	7	4	6
" " " Poor Rate, . .	0	4	6
" " " County Cess, . .	0	9	0
To Profit and Loss for balance, being gain on the year, .	25	0	6
	£125	13	2½

Cr.

	£	s.	d.
By amount received for Grain, ...	9	12	11
" " Roots, &c., . . .	8	18	0
" " Cattle Sold, . . .	23	3	11
" " Dairy Produce, . . .	11	15	10½
" " Eggs and Poultry, . .	1	6	6
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements, ...	70	16	0
	£125	13	2½

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* This includes £1 17*s.* 6*d.*, the rent of a rough hill, used as a paddock for the cattle in favourable weather.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballyougry Model Farm.

TABLE showing the CROPPING of the Ballyougry Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 2 7	4th week in March,	October,	12 cwt.,	4 tons, 15 cwt.,	7 10 6	5 9 6	—	Clusters, one-fourth unsound; American whites and white rocks, about one-fifth unsound.
Mangels,	0 0 12	1st week in June,	December,	5 lbs.,	11½ tons,	6 6 0	6 19 0	—	Long red and orange globe.
Turnips, Swedes,	0 1 15	1st week in June,	December,	6½ lbs.,	19 tons,	7 0 0	12 0 0	—	Skirving's.
Turnips, Aberdeens,	0 1 14	July,	November and Dec.,	6½ lbs.,	12 tons,	7 0 0	2 0 0	—	Succeeded Winter vetches.
Cabbages,	0 0 25	March,	November and Dec.,	5,760 plants,	25¾ tons,	7 8 9	16 11 3	—	Flat Dutch.
GRAIN.									
Oats,	2 0 22	End of March,	September,	12 stones,	130 stones,	2 10 3	5 9 9	—	
GRASS.									
Clover and grass,	1 0 32	April, 1852,	May and August,	11 lbs. clover, and 1 bushel, grass,	Two cuttings; and off one part, three	1 4 6	6 15 6	—	A very excellent crop.
Total,	4 3 7								
"STOLEN CROPS."									
Winter Vetches,	0 1 11	November, 1853,	Cut in June,	3 bushels,	9½ tons,	2 0 0	5 0	—	
Total,	5 0 18								

(Signed), ROBERT HARVEY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

11th January, 1855. WILLIAM M'CLURE, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Bohill Model Farm.

8. BOHILL ORDINARY AGRICULTURAL SCHOOL, County Londonderry.

January 6, 1855.

Agricultural Class.—This class continues to progress favourably. The numbers in attendance during the year were from five to fifteen. We spend about half an hour each day on five days of the week in reading the agricultural books supplied us by the Board. I have promised an agricultural class book as a premium to the boy who answers best at the next examination by the agricultural inspector; and I think it is telling well on the class, every one striving to merit it.

Model Farm—As stated in my former Report, this farm consists of 4A. 3R. 2P. statute measure, and is nearly equally divided into two parts by a large dyke used for draining a large tract of land adjacent to mine.

The first half of my farm lies along the public road, and on that portion I commenced operations first. I am happy to say I have got it all thorough-drained, and divided into two equal fields, containing 1A. 0R. 28P. each. Field No. 1, which I drained in 1853, was under corn last year, and it yielded a very good return, considering the state it was in when it came into my possession, being at that time a complete quagmire. Field No. 2, planted with potatoes in the months of February and March yielded a tolerably fair crop. It may seem injudicious to have so large a quantity of land under potatoes, but when it is borne in mind that this land never was cultivated before, and that it was thickly covered with rushes, it will no longer appear strange that I did not attempt putting any other green crop in it. In looking over the labour abstract you may be surprised that I have paid so little for labour; but being myself young and healthy, I consider it a good and profitable exercise, during my leisure hours, evening and morning, to take the spade in hand and perform any work that may be necessary. Besides, when the time arrives for establishing an "industrial class," both parents and pupils will have seen that industry is not so degrading as many imagine, and that when the teacher himself is willing to take an active part in the cultivation of the farm, they need not object to allow their sons to assist him in his labours.

Live Stock.—My stock at present consists of a cow, a bullock, and a pig. I have not yet commenced to house-feed the cattle, as I have not been able to have a field laid down with clover and grass yet.

Manure.—I continue to pay strict attention to the collecting of manure, knowing that it is impossible for the farmer to succeed well who has not a sufficiency at his disposal.

Permanent Improvements.—Those effected during the past year were the draining of field No. 2, and the building of a cow-house capable of holding four cows.

W. HENRY, Agricultural Teacher.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Bohill Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	25	0	0
,, Paid for Labour,	3	12	0
,, Free Labour of Pupils,	0	9	6
,, Paid for Farm Seeds,	2	14	9
,, ,, Manures,	—		
,, ,, Cattle,	1	7	0
,, ,, Feeding Stuffs,	2	1	0
,, ,, Implements and Repairs,	0	2	3
,, ,, One year's Rent of Farm,	2	18	0
,, ,, ,, Poor Rate,	—		
,, ,, ,, County Cess,	—		
To Profit and Loss for balance, being gain on the year,	13	7	4
	£51	11	10

Cr.	£	s.	d.
By amount received for Grain,	7	5	0
,, ,, Roots, &c.,	1	2	0
,, ,, Cattle Sold,	3	11	3
,, ,, Dairy Produce,	7	13	1
,, ,, Eggs and Poultry,	—		
,, Used by family,	3	19	6
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	28	1	0
	£51	11	10

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Bohill Model Farm.

TABLE showing the CROPPING of the Bohill Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes,	1 0 29	February and March,	October,	90 stones,	600 stones,	6 17 0	3 3 0	—	A tolerably fair crop, and very few of the tubers diseased.
GRAIN.									
Corn,	1 0 29	1st April,	September,	14 stones,	135 stones,	3 6 11	3 18 1	—	A very good crop, on the kind of land it was when I commenced operations on it.
GRASS.									
Unreclaimed,	2 1 24	—	—	—	Pasture for cow, value £2.	—	—	—	
Total,	4 3 2								
Corn in garden,	0 0 20	1st April,	September,	14 stones,	Not known.	—	—	—	
Potatoes,	0 0 10	February,	July.	—	—	—	—	—	
Carrots,	0 0 5	6th May,	November,	Not ascertained,	25½ tons,	Not known.	—	—	
Cabbages,	0 0 5	February,	During the season.	—	—	—	—	—	
Total,	5 0 2*								* There is also 28 perches under School-house, yard, and avenue.

(Signed), WILLIAM HENRY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

6th January, 1855.

WILLIAM ROBB, Manager.

Kednaminsha Model Farm.

9. KEDNAMINSHA ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Monaghan.

February, 1855.

Agricultural Instruction.—As there are neither Agricultural Boarders nor an Industrial Class formed as yet, I cannot expect the Agricultural Class to take an active part in the operations of the farm, if not freely disposed; and this they seldom are when not paid: but if they were paid, I know, from the general feelings of their parents, there would not be the least objection. They are lectured and examined five days in the week, on the science and practice of agriculture, and are brought out to the farm occasionally, to witness the work that is being executed,—when I point out to them every thing I consider it desirable to impress on their minds.

The class has of late greatly increased, now averaging from eighteen to twenty boys, who are able to read in the agricultural works furnished by the board. They are very expert and intelligent in their answering to what they formerly were; showing clearly, in many cases, how sensibly they are aware of the benefits resulting from improved husbandry, as compared with the defective system usually pursued.

Model Farm.—The green crops grown were not near so good as those of the previous year. The potatoes (white rocks) were partly affected by the "dry rot" after being planted, which left them a poor crop; and the turnip crop, too, was light, though I supplied a fair share of good farm-yard dung to them, with some guano, and a mixture of night-soil and ashes. The cause was chiefly due to heavy rains that followed shortly after the sowing of the seed, and encrusted the freshly-tilled soil so much as to hinder very materially the growth of the young plants, and thereby lessen the amount of produce.

The oat crop was very fair, and the barley excellent, as well as the clover and grass seeds sown with them, which promise well.

The loss in the balance sheet is due in part to the light green crop, the large amount paid for labour, which is scarce in the neighbourhood, but chiefly to the fact, that the greater part of the butter of two milch cows, which I kept during the summer and autumn, was made use of in the house, without any thing being entered for it in the valuation returns.

Live Stock.—They consisted of two milch cows, one of which I sold early in winter, when I found she did not prove with calf, one horse, two calves, the offspring of one of the cows last summer, one sheep, and four pigs. The cattle were partly grazed and partly house-fed during the year. The pigs were fed on cooked food, consisting of diseased potatoes, turnips, cabbages, and malt grains.

The Manure as it is brought from the cow-house, piggery, &c., is added to the compost heap, and carefully covered with street and road scrapings or clay from the field, and turned over before being applied to the land, where it is immediately covered in before any of its volatile parts escape.

The Permanent Improvements executed during the year, consisted in the removal of a useless ditch which ran across part of one of the fields, and the filling and levelling of some old bog-holes which this ditch enclosed, adding much both to the size and appearance of the field so improved.

As to the *Progress of Agricultural Improvement* in this locality, there can be no doubt that there is a marked change latterly in the increasing amount of green crops raised, and the number of house-fed stock fattened. Whether my humble exertions have exercised any influence in that way, either by example, or the knowledge imparted to the sons of the neighbouring farmers, the proficiency of the latter is the best criterion. However it shall be my constant endeavour to further so laudable a purpose, to the best of my power and ability.

PATRICK KEVANY, Teacher.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Kednaminsha Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	68	9	0
" Paid for Labour,	34	14	7
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	7	19	0
" " Manures,	0	15	6
" " Cattle,	14	7	0
" " Feeding Stuffs,	5	8	8
" " Implements and Repairs,	0	14	4
" " One year's Rent of Farm,	14	11	6
" " " Poor Rate,	6	6	9
" " " County Cess,	0	17	4
	£148	3	8

Cr.

	£	s.	d.
By amount received for Grain,	30	7	0
" " Roots, &c.,	18	0	10
" " Cattle Sold,	13	15	0
" " Dairy Produce,	2	2	9
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	82	7	0
By Loss on the year,	1	11	1
	£148	3	8

TABLE showing the CROPPING of the Kednaminsha Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips,	2 1 0	June,	December,	5 lbs.,	12 tons,	4 12 6	3 1 6	—	
Potatoes,	1 2 18	March,	November,	12 cwt.,	2 tons,	7 5 2	—	1 2 9	A bad crop from failure.
Vetches,	2 0 0	March,	October,	12 stones,	8½ barrels,	2 18 8	4 13 6	—	
Cabbages,	0 0 20	March,	Different times,	Not ascertained.	—	—	—	—	
GRAIN.									
Oats,	3 2 16	March and April,	September,	18 stones,	6 barrels,	3 0 0	5 16 9	—	
Barley,	1 0 0	April,	September,	16 stones,	14⅓ barrels,	3 8 4	7 15 8	—	The barley was an excellent crop.
GRASS.									
Pasture,	3 0 22	—	—	—	—	—	—	—	
Waste,	0 1 25	—	—	—	—	—	—	—	
Total,	14 0 21								

(Signed), PATRICK KEVANY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

9th March, 1855.

THOS. WELDON TRENCH, Manager.

10. DRUMNAFERN ORDINARY AGRICULTURAL SCHOOL, Co. Tyrone.

January 4th, 1855.

Agricultural Instruction.—The number of pupils who received agricultural instruction in this school during the past year averaged twelve, being a decrease of one upon the previous year.

The following is a comparison of the class at present, with what it was at the date of my last Report:—

On 31st December, 1853.		On 30th December, 1854.	
Agricultural Boarders, .	1	Agricultural Boarders, .	1
Industrial Class, . . .	8	Industrial Class, . . .	8
Day Pupils, ...	6	Day Pupils, ...	8
	15		17

The attention to study, and proficiency acquired by the various members of this class is quite satisfactory.

The Farm.—The farm, which contains 5A. 1R. 16P., is divided into five nearly equal portions, on which a five-course rotation is carried out as follows:—No. 1, turnips, potatoes, mangel-wurzel, kohl rabi, Jerusalem artichokes, beans, peas, and cabbages. No. 2, oats and flax, laid down with clover and grass seed. No. 3, clover and grass for soiling, and hay. No. 4, pasture. No. 5, oats. The produce realized from each crop is given in the annexed returns.

The Live Stock kept upon the farm during the year consisted of two cows, one heifer, and two pigs; all of which were kept in healthy and thriving condition upon the produce of the farm, nothing having been purchased for their support.

Manure.—Constant attention is paid to the collection and preservation of this indispensable appendage to profitable farming. Nothing in the way of special manure was required to be purchased.

Permanent Improvements.—During the past year, a piggery eight feet by five feet six inches was built and slated; and one of the divisions of the farm was thorough drained in the same manner as described in my last Report.

State of Agriculture in this locality.—I feel pleasure in stating that, considering the obstacles which have to be surmounted, the indifference and even prejudices that have to be overcome, in general the farmers of this locality are progressing favourably in agricultural improvement. Winter, which was formerly a season of inactivity, is now employed by a considerable number of farmers in turning up stubble land with the spade, as a preparation for green crops the following year: of the utility of doing so a practical example is afforded upon the model farm. The land, by such treatment, derives much benefit from exposure to air and frost, weeds and insects are partially destroyed, and by effectually opening the soil so as to facilitate the percolation of the water to the drains, the land is in consequence much drier, and absorbs many of the gases carried down by the rain from the atmosphere. The land also becomes more easily worked, and time is economized in the busier days of spring. Altogether it is so important an operation that I have never known those who once gave it a trial to neglect it for a single season afterwards.

It will be seen by the annexed returns that I have introduced the cultivation of Jerusalem artichokes; and as far as I have been able to judge of them I consider they should occupy a place in the cropping of every farmer. I also attempted the cultivation of kohl rabi for the first time in this locality, but as to its comparative value I am not in a position to speak at present.

I very much regret that owing to circumstances I have been prevented hitherto from availing myself of the vast profit that might have been derived from having stolen crops grown upon the farm. It is with some degree of confidence, however, that I expect to be able to introduce this valuable auxiliary into the routine of farm management in the ensuing season.

In conclusion, I beg to express my thanks to M. Brogan, Esq., Sub-Inspector of agricultural schools, for the useful suggestions with which he furnished me, as well as for his courteous demeanour at his visits.

MATTHEW FORBES.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Drumnafern Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	39	10	4
" Paid for Labour,	7	11	11
" Free Labour of Pupils,	2	0	0
" Paid for Farm Seeds,	1	17	8½
" " Manures,		—	
" " Cattle,	10	5	6
" " Feeding Stuffs,		—	
" " Implements and Repairs,	0	9	5
" " One year's Rent of Farm,	3	2	5
" " " Poor Rate,	0	1	6
" " " County Cess,	0	9	11
To Profit and Loss for balance, being gain on the year,	8	15	10
	£74	4	6½

Cr.	£	s.	d.
By amount received for Grain,	1	2	6
" " Roots, &c.,	0	5	8
" " Cattle Sold,	7	3	3
" " Dairy Produce,	7	14	9½
" " Eggs and Poultry,	1	2	4
" " from Landlord on account of Drainage, &c.,	1	9	6
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	55	7	6
	£74	4	6½

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Drumnafern Model Farm.

TABLE showing the CROPPING of the Drumnafern Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 1 30	From 18th March to 22nd April,	October,	8 stones,	4½ tons,	4 10 0	6 19 0	—	
Turnips, Swedes,	0 0 15	20th May,	10th December,	4 lbs.,	21 tons,	3 5 0	11 0 0	—	
,, soft varieties,	0 1 20	3rd June,	20th December,	4 lbs.,	28 tons,	3 5 0	8 0 0	—	
Mangels,	0 0 15	13th May,	November,	6 lbs.,	16 tons,	3 5 0	9 10 0	—	
Kohl Rabi,	0 0 1	13th May,	November,	—	—	—	—	—	Not ascertained.
Cabbages,	—	8th May,	July and August,	1,200 plants,	—	—	—	—	Do.
Jerusalem artichokes,	0 0 5	15th March,	November,	120 stones,	550 stones,	4 17 6	7 10 0	—	
Beans,	0 0 2	3rd March,	August,	—	—	—	—	—	Do.
Peas,	0 0 2	10th April,	August,	—	—	—	—	—	Do.
GRAIN.									
Oats,	1 3 4	1st April,	30th September,	10 stones,	150 stones,	1 1 6	4 17 6	—	
Flax,	0 1 22	15th April,	19th August,	2½ bushels,	35 stones,	2 5 0	9 9 0	—	
GRASS.									
Clover and grass for soiling and hay,	1 0 0	16th April, 1848,	At intervals,	10 lbs. red clover and 2 bushels grass seed,	—	—	—	—	Produce not estimated.
Pasture,	1 0 0	—	—	—	—	—	—	—	
Premises, &c.,	0 0 20	—	—	—	—	—	—	—	
Total,	5 1 16								

(Signed), MATTHEW FORBES, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

8th January, 1855.

JOSEPH ACHESON, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Drumnafern Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	39	10	4
" Paid for Labour,	7	11	11
" Free Labour of Pupils,	2	0	0
" Paid for Farm Seeds,	1	17	8½
" " Manures,	—		
" " Cattle,	10	5	6
" " Feeding Stuffs,	—		
" " Implements and Repairs,	0	9	5
" " One year's Rent of Farm,	3	2	5
" " " Poor Rate,	0	1	6
" " " County Cess,	0	9	11
To Profit and Loss for balance, being gain on the year,	8	15	10
	£74	4	6½

Cr.	£	s.	d.
By amount received for Grain,	1	2	6
" " Roots, &c.,	0	5	8
" " Cattle Sold,	7	3	3
" " Dairy Produce,	7	14	9½
" " Eggs and Poultry,	1	2	4
" " from Landlord on account of Drainage, &c.,	1	9	6
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	55	7	6
	£74	4	6½

TABLE showing the CROPPING of the Drumnafern Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 1 30	From 18th March to 22nd April,	October,	8 stones,	4½ tons,	4 10 0	6 19 0	—	
Turnips, Swedes,	0 0 15	20th May,	10th December,	4 lbs.,	21 tons,	3 5 0	11 0 0	—	
,, soft varieties,	0 1 20	3rd June,	20th December,	4 lbs.,	23 tons,	3 5 0	8 0 0	—	
Mangels,	0 0 15	13th May,	November,	6 lbs.,	16 tons,	3 5 0	9 10 0	—	
Kohl Rabi,	0 0 1	13th May,	November,	—	—	—	—	—	Not ascertained.
Cabbages,	—	8th May,	July and August,	1,200 plants,	—	—	—	—	Do.
Jerusalem artichokes,	0 0 5	15th March,	November,	120 stones,	850 stones,	4 17 6	7 10 0	—	
Beans,	0 0 2	3rd March,	August,	—	—	—	—	—	Do.
Peas,	0 0 2	10th April,	August,	—	—	—	—	—	Do.
GRAIN.									
Oats,	1 3 4	1st April,	30th September,	10 stones,	150 stones,	1 1 6	4 17 6	—	
Flax,	0 1 22	15th April,	19th August,	2½ bushels,	35 stones,	2 5 0	9 9 0	—	
GRASS.									
Clover and grass for soiling and hay,	1 0 0	16th April, 1843,	At intervals,	10 lbs. red clover and 2 bushels grass seed,	—	—	—	—	Produce not estimated.
Pasture,	1 0 0	—	—	—	—	—	—	—	
Premises, &c.,	0 0 20	—	—	—	—	—	—	—	
Total,	5 1 16								

(Signed), MATTHEW FORBES, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

8th January, 1855.

JOSEPH ACHESON, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Kildinan Model Farm.

11. KILDINAN ORDINARY AGRICULTURAL SCHOOL, County Cork.

January 4th, 1855.

Agricultural Instruction.—I regret to have to inform you that the advantages expected to be "derived from the Industrial Class," consisting of six boys, who evinced so much desire at the commencement of the past year to become acquainted with the theory and practice of agriculture, were counteracted by two causes: one arising from the prejudice of the people, who assumed that their sons would be backward in their literary acquirements if they were to work on the farm; the other from the unusually high wages in this locality, which caused the parents to withdraw their children, occasionally, from school during the summer and autumn months, as substitutes for labourers, for whom they were unable to pay. The first of these causes I have nearly removed, by holding monthly examinations, and distributing premiums to the children, according to their merits, when I invariably find the agricultural class to answer far superior to the pupils who devote no time to agricultural instruction. The knowledge of this fact is beginning to circulate in the neighbourhood, and is gradually removing those prejudices from the minds of the people. In consequence of the foregoing causes, I do not require the pupils of the industrial class to work the full time specified in the rules; but all the boys in the agricultural class, consisting of twelve, take part in the light work of the farm, such as sowing seeds, thinning and hoeing turnips, and digging between the drills, during the time heretofore devoted to recreation. In consequence of the short time they work each day, the value of their labour cannot add much to the debtor side of the balance sheet; but it is to be borne in mind, that it is not the pecuniary amount of the labour of the industrial class of any agricultural school that should be taken as a test of the real value of such labour; but the amount of information acquired by such classes, both in the theory and practice of agriculture, and the extent to which they propagate this knowledge in their neighbourhood. The agricultural class read a lesson in the agricultural books every day, and are becoming well acquainted with the subjects contained therein.

Model Farm.—It will be seen from the balance sheet of the past year that my gain is much less than that of 1853, but this is accounted for as follows:—The blight appeared five weeks earlier last year than in 1853, so that the potato crop was nearly destroyed before maturity. With many this crop was wholly lost; but I had a fair crop considering the fate of my neighbours. I got the potatoes planted early in March, so that they were nearly ripe when the blight set in, and there was scarcely one-sixth lost. I had an acre of turnips, which was very well treated, but gave a bad return, in consequence of being destroyed by rabbits, as soon as the leaves appeared above ground—about half an acre was totally lost. I had one acre of oats which would, at least, produce nine barrels of grain, were it not that one-fourth of it lodged early in July. All my green crops were sown in the worst part of the farm last year, and the produce was therefore less than usual. The above causes sufficiently account for the difference of profit between the past year and 1853.

Live Stock.—I have house-fed my cow both summer and winter, except a few hours each day, from which I have obtained a large quantity of valuable manure.

Manures.—I have, at this moment, the largest heap of manure in the neighbourhood, containing not less than one hundred tons.—This I collected early in summer, from headlands and other sources, and mixed

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Kildinan Model Farm.

in alternate layers with the cow-house dung. Being near the public oad it attracted much attention, and ought to be an example of good usbandry in this neighbourhood, where farmers holding from forty to ixty acres of land have not half as much collected at present. I had o buy £2 8*s.* 8*d.* worth of guano last year, and applied it to the turnip rop, at the rate of four cwt. per statute acre. I expect I will not have o incur any expense in this way next year.

The only permanent improvements effected during the past year were the drainage and subsoiling of one rood of the farm.

Garrett Flynn, Teacher.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	25	16	0
" Paid for Labour,	6	9	0
" Labour of Pupils,	2	0	0
" Paid for Farm Seeds,	1	0	0
" " Manures,	2	8	8
" " Cattle,	1	13	0
" " Feeding Stuffs,	0	6	0
" " Implements and Repairs,	0	1	6
" " One year's Rent of Farm,	3	15	0
" " " Poor Rate,	—		
" " " County Cess,	0	2	0
To Profit and Loss for balance, being gain on the year,	11	9	10
	£55	1	0

Cr.

	£	s.	d.
By amount received for Grain,	3	15	0
" " Roots, &c., used in house,	10	0	0
" " Cattle Sold,	5	1	0
" " Dairy Produce,	1	15	0
" " " Used in house,	5	8	0
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	29	2	0
	£55	1	0

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Kildinan Model Farm.

TABLE showing the CROPPING of the Kildinan Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Turnips, ...	1 0 0	From 15th of May to the 10th of June,	December, . .	4 lbs., .	10 tons, including tops,	4 4 0	0 10 0	—	It is to be observed that half an acre of this crop was totally destroyed by rabbits.
Potatoes, ...	1 2 0	March, ...	December, . .	4 barrels, .	26 barrels, .	8 0 0	6 0 0	—	This crop, though insignificant when compared with the produce realized in other localities, was double any in the neighbourhood.
Cabbages, ...	0 0 16	March, ...	—	10,880 plants, .	—	10 0 0	1 5 0	—	
GRAIN.									
Oats, ...	1 0 0	15th March, . .	September, . .	16 stones, .	7 barrels, .	2 8 6	2 16 6	—	About one-fourth of this crop lodged early in July. Were it not for that it would produce, at least, nine barrels per statute acre.
GRASS.									
Common kind, . .	1 2 0	March and May, 1853,	July, ...	4 bushels, .	Not known, .	1 3 0	2 17 0	—	
Total, . .	5 0 16								

(Signed), GARRETT FLYNN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

6th January, 1855.

C. O'DONOVAN, Manager.

12. CLONKEEN ORDINARY AGRICULTURAL NATIONAL SCHOOL, Co. Cork.

Clonkeen Model Farm.

January 2, 1855.

Agricultural Instruction.—There are no agricultural boarders nor industrial class. The "agricultural class" increased from twenty, in 1853, to twenty-five, in 1854. I find them as attentive to the lesson on agriculture as to that on any other subject; and it is gratifying to witness with what alacrity and emulation they perform any light work they are put to on the farm during the half hour devoted to recreation, whenever such work is to be done. As to their proficiency, if due allowance be made for their age and capacities, I think I may venture to pronounce it fair.

Model Farm.—Although I was not very successful in some of my operations, yet I cannot, on the whole, complain, as I have realised a profit of £15 4*s.* 2*d.* in the past year. In my Report for 1853 I stated that, in 1854, I would have nearly established a four-course rotation on the original farm; and, in confirmation of that statement, I beg leave to give an extract from the entry made by M. Brogan, Esq., in the Report Book of the school, when he had inspected, on the 25th of July, last:—"I was much pleased with the improved appearance of the farm since my former visit, and with the systematic manner in which the cropping is now arranged." I also stated that he recommended the enlargement of the model farm by the addition of about 2A. 3R. adjoining; and, acting on his suggestion, I entered on its improvement, so as to fit it for being incorporated with the model farm. In reference to the improvement so effected, Mr. Brogan thus wrote:—"I have been much gratified at the progress effected in 'permanent improvement' since my previous visit." As the whole farm is now brought under one rotation, the former arrangement must be broken up, and two years, at least, must elapse before the course can again be fully established; still, the enlargement effected is a great improvement on the original plan.

Live Stock, &c.—The live stock are fed partly from the produce of the model farm, and partly on another farm in my possession. As I could not with any degree of accuracy ascertain the profit or loss arising from them, as far as they are connected with the model farm, it may suffice to say, that the cows are partially house-fed, and that due attention is paid to their comfort and cleanliness. All the live stock are kept in every night throughout the year; and this, of course, tends materially to the increase of the manure heap, besides being a great improvement, as contrasted with the practice of my neighbours. It may be fit, also, to remark here, that the plan I adopt in keeping an account of my transactions on the model farm is, to debit it with all expenses attending its cultivation, &c., and to credit it by the amount of the produce at a fair valuation.

Manures.—The manure-heap is made up of dung from the farm offices, earth, peat, sea-sand, chopped furze, &c., &c. Its gases are kept from escaping by thorough mixing, and by covering with peat or earth; and the liquid part is preserved by having always at hand some substance suited to imbibe it. I applied one and a-half cwt. of guano to three roods for Swedish turnips, in lieu of half the complement of farm-yard manure, and I found that the crop was inferior to that on the part to which the full complement of dung was given.

Permanent Improvement.—I levelled twenty-five perches of a huge, cumbersome ditch, which stood uselessly in a sunny and sheltered part of the farm, and caused a waste of as many perches of land; and with the stones, of which this was partly composed, I made up nine and a-half perches of a lasting and efficient *boundary* fence. I also reclaimed

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Clonkeen Model Farm.

ten perches of a rocky brake, which stretched unsightly into the farm, and at every ploughing and harrowing of the adjacent parts, proved a great obstruction.

Progress of Agricultural Improvement, &c.—Owing to the high prices of stock and agricultural produce now prevailing, and the consequent amelioration of the farmer's condition since the times of famine, agriculture has been attended to with some energy; but nowhere in the locality has it been yet carried out by the lower, or even middle classes of farmers, according to any approved system. However, the proper cultivation of green crops is beginning to be better known; the advantages of raising artificial grasses and stolen crops are appreciated; and the losses sustained on account of the ill-treatment of land, and the mismanagement of manure, are acknowledged. These, and similar subjects, are frequently discussed by the pupils with their parents, and I confidently hope the latter will soon yield their prejudices, and be ultimately induced to adopt a judicious system of farm management.

Concluding Observations, &c.—The Rev. Joseph Sheahan, P.P., the manager, who is ever solicitous for the welfare of his parishioners, still keeps a vigilant eye to the progress of this school and farm. I am working on without any other co-operation; and I am proud to hear the people in the locality acknowledge that the saying "schoolmasters are bad farmers," is not only inapplicable in my case, but that they appear anxious to "take a leaf out of my book," in order to insure success in their own management.

DANIEL CALLAGHAN, Teacher.

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Clonkeen Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,		—	
„ Paid for Labour,	15	4	11
„ Free Labour of Pupils,	0	6	0
„ Paid for Farm Seeds,	4	14	7
„ „ Manures,	7	9	8
„ „ Cattle,		—	
„ „ Feeding Stuffs,		—	
„ „ Implements and Repairs,		—	
„ „ One year's Rent of Farm,	7	8	0
„ „ „ Poor Rate,	0	10	0
„ „ „ County Cess,	0	1	8
To Profit and Loss for balance, being gain on the year,	15	16	2
	£51	11	0

Cr.

	£	s.	d.
By amount received for Grain,	18	6	0
„ „ Roots, &c.,	27	5	3
„ „ Cattle Sold,		—	
„ „ Dairy Produce,		—	
„ „ Eggs and Poultry,		—	
By value of Clover and Vetches*,	5	19	9
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,		—	
	£51	11	0

* See Report, head III.

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Clonkeen Model Farm.

Table showing the Cropping of the Clonkeen Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
Green Fallow Crops.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Turnips, Swedish,	0 3 30	9th June,	December,	4 lbs.,	16 tons,	8 2 2	7 17 10	—	
Turnips, Aberdeen,	0 2 0	14th July,	December,	4 lbs.,	12 tons,	7 0 0	2 0 0	—	A poor crop, owing to the reduced state of the land.
Cabbages,	0 0 20	March,	Various times,	1 plant in 2 ft. square,	Not known,	8 0 0	4 0 0	—	
Potatoes,	0 1 20	March,	Used in Autumn,	8 cwts.,	3 tons, 14 cwts.,	8 10 0	3 16 8	—	
Carrots,	0 0 20	20th April,	November,	6 lbs.,	16 tons,	9 0 0	15 0 0	—	Considered an excellent crop in this locality.
Grain.									
Wheat,	1 3 0	December, 1853,	September,	12 stones,	4 barrels,	3 15 2	3 4 10	—	
Oats,	1 0 20	March,	September,	14 stones,	108 stones,	2 18 0	2 10 0	—	
Grass.									
Clover and Rye grass,	1 0 28	April, 1853,	Used for soiling,	8 lbs. clover, and 1 bush. rye-grass,	Not ascertained,	1 18 8	1 11 2	—	Valued at £3 10*s*. per acre.
Spring Vetches,	0 2 20	April,	July and August,	2 bushels, and 1 bushel, oats,	Valued at £3 per acre,	2 11 8	0 8 4	—	
Waste land,	0 2 12	—	—	—	—	—	—	—	
Total,	7 1 12	—	—	—	—	—	—	—	Boundary and roads not included.
"Stolen Crops."									
Rape,	0 0 20	Transplanted in September, 1853,	April,	—	Valued at £1 per acre.	—	—	—	

(Signed), Daniel Callaghan, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January, 1855.

Joseph Sheahan, Manager.

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Clonkeen Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	—			By amount received for Grain,	18	6	0
„ Paid for Labour,	15	4	11	„ „ Roots, &c.,	27	5	3
„ Free Labour of Pupils,	0	6	0	„ „ Cattle Sold,	—		
„ Paid for Farm Seeds,	4	14	7	„ „ Dairy Produce,	—		
„ „ Manures,	7	9	8	„ „ Eggs and Poultry,	—		
„ „ Cattle,	—			By value of Clover and Vetches*,	5	19	9
„ „ Feeding Stuffs,	—			By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	—		
„ „ Implements and Repairs,	—						
„ „ One year's Rent of Farm,	7	8	0				
„ „ „ Poor Rate,	0	10	0				
„ „ „ County Cess,	0	1	8				
To Profit and Loss for balance, being gain on the year,	15	16	2				
	£51	11	0		£51	11	0

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* See Report, head III.

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Clonkeen Model Farm.

TABLE showing the CROPPING of the Clonkeen Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Turnips, Swedish,	0 3 30	9th June,	December,	4 lbs.,	16 tons,	8 2 2	7 17 10	—	
Turnips, Aberdeen,	0 2 0	14th July,	December,	4 lbs.,	12 tons,	7 0 0	2 0 0	—	A poor crop, owing to the reduced state of the land.
Cabbages,	0 0 20	March,	Various times,	1 plant in 2 ft. square,	Not known,	8 0 0	4 0 0	—	
Potatoes,	0 1 20	March,	Used in Autumn,	8 cwts.,	8 tons, 14 cwts.,	8 10 0	3 16 8	—	
Carrots,	0 0 20	20th April,	November,	6 lbs.,	16 tons,	9 0 0	15 0 0	—	Considered an excellent crop in this locality.
GRAIN.									
Wheat,	1 3 0	December, 1853,	September,	12 stones,	4 barrels,	3 15 2	3 4 10	—	
Oats,	1 0 20	March,	September,	14 stones,	108 stones,	2 18 0	2 10 0	—	
GRASS.									
Clover and Rye grass,	1 0 28	April, 1853,	Used for soiling,	8 lbs. clover, and 1 bush. rye-grass,	Not ascertained,	1 18 8	1 11 2	—	Valued at £3 10*s*. per acre.
Spring Vetches,	0 2 20	April,	July and August,	3 bushels, and 1 bushel, oats,	Valued at £3 per acre,	2 11 8	0 8 4	—	
Waste land,	0 2 12	—	—	—	—	—	—	—	
Total,	7 1 12	—	—	—	—	—	—	—	Boundary and roads not included.
"STOLEN CROPS."									
Rape,	0 0 20	Transplanted in September, 1853,	April,	—	Valued at £1 per acre.	—	—	—	

(Signed), DANIEL CALLAGHAN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January, 1855.

JOSEPH SHEAHAN, Manager.

13. FEAKLE ORDINARY AGRICULTURAL SCHOOL FARM, County Clare.

II. Appendix to Dr. Kirkpatrick's Report.

Feakle Model Farm.

Agricultural Instruction.—There are no boarders, nor is there an "Industrial paid Class." Those pupils capable of receiving instruction in agriculture are so instructed for one hour each day, either in the school-room or on the farm, and I have to report that both the attention and proficiency of the pupils continue very satisfactory; besides there being an increased number.

Model Farm.—In my Report for the year 1853, I stated the particulars of the farm as to extent, rotation, &c., which continue unchanged; and I have now but to express a hope that the profits appearing in the balance sheet will be considered satisfactory, and show that my farm management has been successful.

Live Stock.—In previous years I could not keep more than two cows and two heifers; but having the land in a better state of cultivation this year, I was able to keep an additional cow, as well as a greater number of pigs. The produce of the dairy was used by my family, except some butter sold, the amount of which appears in the balance sheet.

Manures.—I had no occasion to purchase any extraneous manures this year, as there was an abundance of farm-yard manure. I had always a supply of dried peat-mould at hand to place behind the cows to absorb the liquid; by this means what would otherwise be lost was preserved in the absence of a tank, which I hope shortly to be able to construct. I may here state that I have not taken into account the value of the straw, or the second and third cuttings of grass, as I did not charge the farm with the value of the manure accumulated.

Permanent Improvement.—The only permanent improvement undertaken on the farm this year was the building an enclosing wall round the haggard, which is not yet finished, and on which account I have not taken credit for it under the head of unexhausted improvements.

At the commencement of my farming operations, and for a long time subsequent, I had many difficulties to contend with, such as the prejudice of the people in not allowing their children to work on the farm, and the impoverished condition and unseemly state of the land when it came into my hands; but now, I hope, I have these impediments in a great measure removed. The pupils work cheerfully and diligently when required, and I will for the future have very little trouble in the cultivation of the farm.

Progress of Agricultural Improvement in this Locality.—Although in this very backward district of the country, circumstances are opposed to the small farmers carrying out the "improved system" of husbandry, yet I can assert with confidence that much good has been effected by the working of this model farm, coupled with my efforts to disseminate whatever share of agricultural knowledge I possess.

I have been frequently consulted on the kind and quantity of grasses to be sown, and the best and surest way to preserve and apply manures to the different green crops; and in every instance I found that those who acted upon my advice had reason to be thankful.

I am of opinion that it would be another step in the right direction if the Commissioners would award a grant for the payment of a certain number of boys as an "Industrial Class" in schools situate, as this, in impoverished districts, and where local aid cannot be procured. Such an arrangement would conduce more than any other I am aware of to direct the minds of the youths attending our schools towards improved agricultural management, whether in the cultivation of their own farms, or the farms of others who may employ them as labourers.

MICHAEL MORISSY, Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Feakle Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
amount of Inventory and Valuation at commencement of year, ...	55	6	0
" Paid for Labour, ...	15	0	7
" Free Labour for Pupils, . . .	0	15	0
" Paid for Farm Seeds, ...	4	3	6
" " Manures, ...	—		
" " Cattle, ...	4	10	0
" " Feeding Stuffs, . . .	3	10	0
" " Implements and Repairs, . .	1	3	7
" " One year's Rent of Farm, . .	5	12	7
" " " Poor Rate, . .	1	8	6½
" " " County Cess, . .	0	11	3
To Profit and Loss for balance, being gain on the year, .	9	16	1½
	£101	17	2

Cr.

	£	s.	d.
By amount received for Grain, ...	7	11	8
" " Roots, &c., ...	—		
" " Cattle Sold, . . .	17	8	6
" " Dairy Produce, . . .	6	7	0
" " Eggs and Poultry, . . .	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements, ...	70	10	0
	£101	17	2

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II. Appendix to Dr. Kirkpatrick's Report.

Feakle Model Farm.

TABLE showing the CROPPING of the Feakle Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 1 20	March,	October,	80 stones,	600 stones,	7 0 0	8 0 0	—	Consumed in the house.
Turnips,	0 2 10	1st June,	Nov. and Dec.,	2 lbs.,	16 tons,	4 2 6	10 5 6	—	A portion of this crop already consumed by cattle.
Mangels,	0 1 0	1st week of May,	November,	4 lbs.,	18 tons,	5 10 0	10 14 0	—	
Cabbages,	0 0 20	March,	—	8,050 plants,	20 tons,	6 0 0	5 0 0	—	This crop was consumed—partly by cattle and partly in the house.
Parsnips,	0 0 10	27th March,	November,	6 lbs.,	12 tons,	7 10 0	8 10 0	—	
Carrots,	0 0 10	April,	November,	6 lbs.,	14 tons,	7 10 0	8 0 0	—	
GRAIN.									
Oats,	1 1 30	March,	18th September,	16 stones,	140 stones,	3 2 10	5 0 10	—	The greater portion of this crop yet on hands.
Barley,	1 1 30	19th April,	6th September,	12 stones,	160 stones,	2 19 2	5 14 2	—	The entire of this crop is still on hands.
GRASS.									
Hay,	0 1 30	April,	July,	12 lbs. clover, and 1½ bushels rye-grass,	4 tons,	2 0 0	3 0 0	—	
Clover and Rye-grass for soiling,	1 0 0	April, 1853,	June to November,	Ditto,	Cut three times,	—	—	—	Weight or value not estimated. This, as well as all the other green crops, was consumed on the farm.
Total,	5 3 0								

(Signed), MICHAEL MORISSY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief,

8th January, 1855.

JAMES DORR, Manager.

Parteen Model Farm.

14. PARTEEN ORDINARY AGRICULTURAL SCHOOL, County Clare.

January, 1855.

Agricultural Class.—The number in this class (thirty) remains unchanged since last Report, and its members continue to evince the same desire for improvement in agriculture, both in theory and practice; especially the latter, as they often solicit me to allow them to go out to work.

Industrial Class.—This class consists of four boys, as heretofore, who are eminently useful for performing the light work; but they begin to feel dissatisfied with the small remuneration.

Model Farm.—In the culture of potatoes I have tried bog-mould this last season again, by applying it at the time of planting along with the manure, for the purpose of preserving the tubers from disease, and, I am happy to state, with the most beneficial result, as scarcely any of the tubers suffered, although the stalks were much blighted. The wheat sown in drills, and laid down with grass seeds, produced about 340 stone per acre, Irish; while that sown broadcast produced no more than 260 stone; the soil being lea, dug into beds, and the seed covered from the alleys. The clover, sown with the wheat in drills last April, looks very promising now, so that I would strongly recommend sowing in drills, when the land is to be laid down with grass; as the hoeing in spring, to cover the grass seed, eradicates weeds, renews the soil, and assists to invigorate the wheat plants very much. A decided instance of this came under my notice last spring, where part of the wheat was turned quite brown, from the ravages of the wire-worm, after hoeing, it gradually became perfectly green again, although there was no rain in the interim. There is also a great saving of seed, ten stone being sufficient to sow an Irish acre when drilled. The plan I followed in sowing the seed is to open drills two feet apart, with a common one-horse plough, shake half the seed, then split the drills and deposit the remainder of the seed, and level with a harrow drawn along the drills. This leaves the wheat drills twelve inches asunder, which gives room enough for hoeing between the lines in spring.

The greatest drawback I now labour under is the want of more land, and there appears almost an impossibility of getting any; as, with my present little holding, I can never realise any thing of a respectable profit.

Live Stock.—These I exclusively house-feed, both in summer and winter; as I have no standing or paddock, except the yard, nor any chance of any, as such cannot be had here on any terms. Part of the produce is used by the family, and the remainder sold in Limerick.

Manures.—I have always a supply of bog-mould at hand to cover the manure with, after each making-up; and by means of the liquid application, I was enabled to obtain five cuttings off a part of the grass division this last season. I prepare stimulating manures myself, so that I have no occasion to purchase any.

Progress of Improvement.—The farmers in this locality are rapidly improving in their practice, especially in the growing of green fallow crops; and a few, who have leases, and who are not in dread of being deprived of the fruits of their industry, are draining extensively, levelling internal fences (of which there are plenty), and even sub-soiling; but I cannot presume to ascribe them to the working of the model farm, although I flatter myself that it is to a certain extent useful in this way.

JOHN O'DEA, Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Parteen Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	*s.*	*d.*
To amount of Inventory and Valuation at commencement of year,	39	3	2
" Paid for Labour,	3	12	7
" Free Labour of Pupils,	3	0	0
" Paid for Farm Seeds,	1	5	9
" " Manures,	4	18	0
" " Cattle,	12	4	0
" " Feeding Stuffs,	24	9	3
" " Implements and Repairs,	0	2	0
" " One year's Rent of Farm,	8	0	0
" " " Poor Rate,	0	10	0
" " " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	22	18	2
	£120	2	11

Cr.	£	*s.*	*d.*
By amount received for Grain,	9	6	0
" " Roots, &c.,	12	14	4
" " Cattle Sold,	25	9	2
" " Dairy Produce,	13	8	11
" " Eggs and Poultry,	3	10	4
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	55	14	2
	£120	2	11

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Parteen Model Farm.

TABLE showing the CROPPING of the Parteen Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes, ...	0 1 20	March, . . .	October, . .	64 stones, .	8 tons, . .	13 2 6	13 10 0	—	All safe.
Turnips, ...	0 0 16	June, . . .	November, . .	5 lbs., . .	16 tons, . .	10 3 4	4 4 8	—	Middling crop.
Mangels, ...	0 1 10	May, . . .	November, . .	5½ lbs., . .	18 tons, . .	10 10 0	7 10 0	—	Fair.
Cabbages, . . .	0 0 30	March and April, .	Different times, .	—	Not taken, .	10 0 0	6 0 0	—	
GRAIN.									
Wheat, ...	0 2 28	December, 1853, .	August, . .	6 stones in drills,	326 stones, .	6 2 0	19 14 2	—	Heavy crop.
				10 stones broadcast, . .	248 stones, .	6 17 6	12 15 2	—	Middling.
Barley, ...	0 0 20	April, . . .	August, . .	7 stones, dug in,	320 stones, .	6 0 0	8 0 0	—	About forty-six-fold return.
GRASS.									
Clover and Rye-grass, .	0 1 30	April, . . .	Cut when wanted for house feeding, .	12½ lbs., . .	30 tons, . .	5 2 6	9 2 6	—	Five cuttings off a part of this by means of liquid manure.
Total, . .	2 0 34								
"STOLEN CROPS."									
Vetches, ...	0 0 12	September, 1853, .	May, . . .	12½ stones, .	22 tons, 2 cwt.,	5 5 0	3 11 6	—	
Cabbages, ...	0 1 0	September and Oct.,	Different times, .	—	Not taken, .	—	—	—	
Rape, . . .	0 1 0	October and Nov., .	April, . . .	—	Not taken, .	—	—	—	
	0 2 12								

(Signed), JOHN O'DEA, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

16th January, 1855.

THOMAS KANE, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Killacolla Model Farm.

15. KILLACOLLA ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Limerick.

January, 1855.

Agricultural Instruction.—The attendance and progress of the pupils composing the Agricultural Class continues satisfactory.

No Industrial Class has yet been formed, though I am convinced the want of such a class greatly counteracts our usefulness; and in order to carry out the system as it ought, I would pay two of the boys myself, should it meet the approbation of the Commissioners to appoint such a class in this school.

Model Farm.—The extent of the farm and course of cropping followed, being stated in my former report, I consider it unnecessary to describe them here, as no change has been made in those respects. The part of the farm intended for green crops was subsoiled in October last to the depth of sixteen inches, and left exposed in raised ridges till required to be prepared in spring. I have put down one rood of vetches and some cabbages as stolen crops.

Live Stock.—I have added a cow to the number of cattle supported on the farm last year.

Manure.—I have carefully attended to this important element of good farming, impressing on the minds of the children the necessity of collecting every material that would augment or improve it, particularly the scouring of dikes and ditches, road scraping, together with all weeds collected off the farm, mixing the compost in alternate layers with the farm-yard dung as early as possible in the year, that the compost may be decomposed and have the desired effect on the soil.

Progress of Agricultural Improvement.—I am happy to state that I notice a very marked improvement in the management of the crops of this locality, particularly on the farms of the parents of those boys who have been most attentive to my instructions.

I again beg leave to bear testimony to the fact that the pupils are rather stimulated than retarded in their literary studies by a judicious course of instruction in the principles of agriculture.

DANL. CUSACK, Teacher.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Killacolla Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	32	0	0
„ Paid for Labour,	3	19	2
„ Free Labour of Pupils,	2	0	0
„ Paid for Farm Seeds,	1	13	0
„ „ Manures,	0	11	0
„ „ Cattle,	1	0	0
„ „ Feeding Stuffs,	—		
„ „ Implements and Repairs,	1	5	0
„ „ One year's Rent of Farm,	10	0	0
„ „ „ Poor Rate,	—		
„ „ „ County Cess,	1	1	0
To Profit and Loss for balance, being gain on the year,	51	15	11
	£105	5	1

Cr.

	£	s.	d.
By amount received for Grain,	10	3	1
„ „ Roots, &c., used in house,	16	0	0
„ „ Cattle Sold,	11	15	0
„ „ Dairy Produce,	23	11	0
„ „ Eggs and Poultry,	0	10	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	43	6	0
	£105	5	1

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Killacolla Model Farm.

TABLE showing the CROPPING of the Killacolla Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation. Profit.	Result of Cultivation. Loss.	Observations.
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 3 0	March,	October,	60 stones,	5⅓ tons,	2 5 9	17 10 11	—	Rated at 6*d*. per stone; manuring not charged, as having it on the farm.
Turnips	0 0 10	May,	December,	4 lbs.,	16 tons,	2 10 0	13 10 0	—	
Mangels,	0 0 30	May,	October,	8 lbs.,	16 tons,	2 10 0	13 10 0	—	
GRAIN.									
Oats,	1 1 0	March,	September,	15 stones,	156 stones,	1 2 4	6 5 2	—	
GRASS.									
Grass, Clover, & Rye-grass,	1 3 0	March,	August,	10 lbs. of clover, and 3 bushels of Italian rye-grass,	2⅓ tons,	0 4 0	4 4 0	—	
Total,	4 0 0								
"STOLEN CROPS."									
Cabbages,	0 1 0	—	—	—	—	—	—	—	
Vetches,	0 1 0	—	—	—	—	—	—	—	
Total,	0 2 0	—	—	—	—	—	—	—	

(Signed), DANIEL CUSACK, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 6, 1855.

JAMES RYAN, P.P., Manager.

16. GARRYHILL ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Carlow.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Garryhill Model Farm.

Agricultural Instruction is given half an hour each day. There are at present twelve pupils in the agricultural class, who, as they daily perceive the practical utility of agricultural knowledge, feel an increasing interest in, and pay proportionate attention to, their studies. The amount of the pupils' progress in this useful study may be estimated from the following observations extracted from the Daily Report Book:—

September 29th, 1854.—Visited this school; and was much pleased with the proficiency of the scholars in the Agricultural Class, as well as with the cleanliness and good management of the farm.

BESSBOROUGH.
C. Bessborough.

Sept. 28th.—Visited this school; was happy to find that the orange jelly—a species of turnip only last year introduced into this locality—has succeeded so well under the management of the teacher. The experiment cannot fail to realize beneficial results among the farming classes. Some of the turnips alluded to, which I have seen on the farm, can scarce weigh less than ten pounds each. Pleased with the answering of the Agricultural Class of pupils. Had not leisure to test the proficiency of the others.

WILLIAM KINSELLA, R.C.C., Bagnalstown.

The cultivation of the model farm has been attended with much success. I have been awarded a medal for my green crops, together with a money premium, for a heifer, from the Jarone Agricultural Society.

Live Stock and Dairy Management remain the same as explained in my previous Reports, and the results continue to be most satisfactory.

Manure is collected, preserved, and applied in the same careful and judicious manner as in previous years.

Permanent Improvements consisted in the lifting and removal of stones, which have not yet been completely cleared from the land.

Agricultural Improvement in this neighbourhood is truly gratifying. In support of this I could advance many opinions, but I will confine myself to one. The Earl of Bessborough, at the annual meeting of the Iverk Farming Society, held in Piltown, county Kilkenny, in November last, thus expressed himself:—

> "It appears to me that the green crops have not that weight, nor are they quite as well tilled as I should wish to see them. I believe the seasons have been against them; but I may tell you, who live in the rich vale of Iverk, that while I was in the county of Carlow, where the land for green crops ought not to be as good as yours—where they had the same seasons, the same weather—they had better green crops than yours; and how could they acquire these except by the use of a great quantity of manure, and paying attention to the tillage of the land. I was delighted with the mode in which the turnip fields in the county of Carlow were tilled, and I would wish my county Kilkenny tenants to imitate my county Carlow tenants, and till their land as well."

In conclusion I beg to state that the Earl of Bessborough continues his liberal aid and encouragement, through his excellent agent, J. Blacket, Esq.

His lordship has built a residence for me on the farm, which, besides being comfortably arranged, is most conveniently situated to the out-offices, &c., as to facilitate my attendance to the stock and to the ordinary business of the model farm.

L. RYAN, Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Garryhill Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	57	15	4
,, Paid for Labour,	1	0	0
,, Free Labour of Pupils,	9	3	2
,, Paid for Farm Seeds,	1	17	4
,, ,, Manures,	—		
,, ,, Cattle,	6	17	0
,, ,, Feeding Stuffs,	7	11	0
,, ,, Implements and Repairs,	0	7	0
,, ,, One year's Rent of Farm,	3	10	0
,, ,, ,, Poor Rate,	—		
,, ,, ,, County Cess,	0	3	11
To Profit and Loss for balance, being gain on the year,	20	12	9
	£108	17	6

Cr.	£	s.	d.
By amount received for grain,	3	19	1
,, ,, Roots, &c.,	—		
,, ,, Cattle Sold,	37	2	6
,, ,, Dairy Produce,	6	7	11
,, ,, Eggs and Poultry,	0	13	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	60	15	0
	£108	17	6

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Garryhill Model Farm.

TABLE showing the CROPPING of the Garryhill Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Mangels,	0 1 0	1st May,	October,	6 lbs.,	15 tons,	2 10 0	16 5 0	—	
Turnips,	1 2 6	15th May,	December,	4 lbs.,	18 tons,	2 10 0	15 10 0	—	
Cabbages,	0 0 30	Intervals,	—	—	—	—	—	—	Not ascertained.
Parsnips,	0 0 2	—	—	—	—	—	—	—	Ditto.
Carrots,	0 0 2	—	—	—	—	—	—	—	Ditto.
Potatoes,	0 1 24	24th March,	September,	4 barrels,	90 cwts.,	5 15 0	12 15 0	—	
Rape,	0 1 0	July and August,	—	—	—	—	—	—	Ditto.
GRAIN.									
Oats,	0 2 0	1st April,	15th August,	14 stones,	3 barrels,	1 18 9	—	0 0 6	
Barley,	0 1 24	24th April,	15th August,	11 stones,	10 barrels,	1 18 6	6 4 0	—	
GRASS.									
Soiling,	1 0 29	—	—	—	—	—	—	—	Ditto.
Total,	4 2 37								
"STOLEN CROPS."									
Vetches,	0 1 8	October, 1853,	May,	12 stones,	Not ascertained.				

(Signed), LOUGHLIN RYAN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

20th January, 1855.

JOHN BLACKET, Manager.

APPENDIX I.

II. Appendix to Dr Kirkpatrick's Report.

Twomilehouse Model Farm.

17. TWOMILEHOUSE ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Kildare.

January, 1855.

Agricultural Instruction.—I feel gratified in being enabled to report an increase of seven pupils in the Agricultural Class for the past year, and that the pupils composing it continue to evince the same careful application to, and marked progress in, their agricultural lessons which have so often met with the approbation of the Agricultural Inspector and other visiters.

Model Farm.—The particulars of the farm, and the system of cropping carried out thereon, continue the same as explained in my previous Reports, except that as regards the cattle, I have, at the suggestion of Mr. Brogan, effected an alteration in the *arrangement* of the crops so as to ensure their regular succession for the future; and also, having no land immediately attached to my residence, I have laid off a portion of the farm to be cultivated as a kitchen garden on an improved plan, the example of which will be of much benefit to the pupils. The cropping of the past year was highly successful, and the efficiency of the cultivation met the unqualified approval of all who inspected it.

Permanent Improvements.—No works of this nature were effected or required on the farm; but a considerable deal has been done in the farm-yard, where I have erected a new range of offices, comprising barn, dairy, piggery and root-shed.

With the increased facilities which will be afforded by the foregoing improvements, I expect that the working and success of the agricultural department will be greatly promoted, and its efficiency as an example of improved husbandry to the neighbourhood, and as a training ground for our growing-up farmers and labourers, will be greatly enhanced.

PATRICK WALSH, Teacher.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Tromilehouse Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	25	0	0
,, Paid for Labour,	9	1	10
,, Free Labour of Pupils,	1	12	0
,, Paid for Farm Seeds,	5	1	0
,, ,, Manures,	—		
,, ,, Cattle,	1	12	0
,, ,, Feeding Stuffs,	3	1	8
,, ,, Implements and Repairs,	0	2	0
,, ,, One year's Rent of Farm,	4	4	8½
,, ,, ,, Poor Rate,	0	4	0
,, ,, ,, County Cess,	0	3	2½
To Profit and Loss for balance, being gain on the year,	14	17	10
	£64	0	3

Cr.

	£	s.	d.
By amount received for Grain,	5	8	9
,, ,, Roots, &c.,	0	19	0
,, ,, Cattle Sold,	4	4	0
,, ,, Dairy Produce,	6	19	0
,, ,, Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	46	9	6
	£64	0	3

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Twomile-house Model Farm.

TABLE showing the CROPPING of the Twomilehouse Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per acre.	Result of Cultivation. Profit.	Result of Cultivation. Loss.	Observations.
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes, . . .	1 0 2	March, . . .	November, .	12 cwt., . .	4 tons, 14 cwt.,	10 0 0	8 16 0	—	
Turnips, . . .	0 2 9	May, . . .	December, .	3 lbs., . .	15 tons, . .	8 0 0	1 15 0	—	Transplanted some after winter vetches, equally as good as those from seed.
Mangels, . . .	0 0 25	May, . . .	November, .	3 lbs., . .	15 tons, . .	8 0 0	3 0 0	—	
Cabbages, Carrots, and Parsnips, . .	0 0 28	March and April, .	—	—	—	—	—	—	
GRAIN.									
Oats, ...	2 0 5	March, . . .	September, .	16 stones, .	17½ cwt., . .	4 0 0	3 10 0	—	A slight blemish.
GRASS.									
Italian rye-grass and clover,	0 2 17	May, . . .	July and Sept.,	2 bushels and 9 lbs. clover,	2 tons, . .	1 15 0	4 5 0	—	Two cuttings for hay.
Total, . .	4 2 6								
"STOLEN CROPS."									
Winter Vetches, . .	0 1 25	October, . .	Soiling, . .	12 stones, .	5 tons, . .	2 12 0	Not computed, being used green.		

(Signed,) PATRICK WALSH, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 7th, 1855.

TIMOTHY KAVANAGH, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Ooning Model Farm.

18. OONING ORDINARY AGRICULTURAL NATIONAL SCHOOL, Co. Kilkenny.

January 7th, 1855.

Agricultural Class.—Of this class I feel happy to say that, during their time of attendance at school, their application to study and the proficiency acquired have given both me and their parents ample satisfaction.

Model Farm.—The degree of success consequent on my labours for the last year has been very satisfactory, inasmuch as the profit realised exceeds that of any of the preceding years, which I attribute in a great measure to the care bestowed on the cultivation, as well as to the considerably enhanced price of every species of farm produce.

Live Stock.—I regret I have to state that I lost a cow last February by that destructive and almost incurable disease, pleurapneumonia, which has made extensive ravages in this neighbourhood, one farmer losing twenty-one out of twenty-two cows by it. I could not prudently replace her, as a neighbour had a diseased stock during the whole year immediately adjoining my premises, and it would be dangerous to purchase another while the contagion remained. Others have sold their cows to avoid the danger, and none of them have as yet ventured to replace them, fearing that the infection is not yet quite cleared away.

Manures.—Although some deficiency must be presumed to exist in the supply of manure through the loss of the cow, I have, by unremitting exertions in collecting from the farm every substance available for being turned into manure, and also by the keeping of some pigs, procured a supply, almost abundant enough, for maintaining the fertility of the farm. The deficiency I have supplied by the purchase of bone manure. In the formation of the manure heap, alternate layers of absorbent earth have been mixed with the dung, in order to prevent decomposition going on too rapidly, and also to preserve the gases generated during that process.

Agricultural Improvement has recently so rapidly progressed in this locality, that I might presume to say there cannot be found even an isolated instance of successional grain cropping; the alternate system of husbandry and house-feeding cattle are generally practised; and the beneficial results of a sound, scientific and judicious system of farm culture are apparent both in the improved fertility of the land and the comfortable condition of the cultivators.

JOHN RODGERS, Teacher.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Ooning Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	17	2	0
„ Paid for Labour,	2	6	2
„ Free Labour of Pupils,	3	15	0
„ Paid for Farm Seeds,	2	1	6½
„ „ Manures,	0	6	0
„ „ Cattle,	1	11	0
„ „ Poultry,	0	4	0
„ „ Feeding Stuffs,	0	12	0½
„ „ Implements and Repairs,	—		
„ „ One year's Rent of Farm,	5	2	6
„ „ „ Poor Rate,	0	3	11
„ „ „ County Cess,	0	5	3
To Profit and Loss for balance, being gain on the year,	7	14	1½
	£41	3	6½

Cr.	£	s.	d.
By amount received for Grain,	14	7	5
„ „ Roots, &c.,	7	14	9½
„ „ Cattle Sold,	5	10	0
„ „ Dairy Produce,	1	12	4
„ „ Eggs and Poultry,	—		
„ Miscellaneous,	0	2	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	11	17	0
	£41	3	6½

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ooning Model Farm.

TABLE showing the CROPPING of the Ooning Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips, ...	0 2 4	14th May and 10th June, . . .	December, . .	3 lbs., . .	12 tons, . .	6 0 0	4 0 0	—	
Mangels, ...	0 0 20	First week of May, .	November, . .	5 lbs., . .	12 tons, . .	6 0 0	4 0 0	—	
Cabbages, . . .	0 0 10	March.	—	—	—	—	—	—	
Potatoes, . . .	0 0 18	March, . . .	August to November,	10 cwt., . .	4 tons, . .	8 0 0	5 13 0	—	
Parsnips, . . .	0 0 8	March, . . .	November, . .	6 lbs., . .	6 tons, . .	8 0 0	—	—	Parsnips being used in the house I have not ascertained the profit.
GRAIN.									
Oats, ...	1 3 0	April, . . .	September, . .	1 barrel, .	6 barrels, 8 st.,	3 0 0	1 18 6	—	
GRASS.									
Grass, ...	1 3 0	—	July, . . .	6 lbs. clover, & 2 bush. rye-grass,	2 tons, . .	2 0 0	1 8 6	—	
Total, . .	4 2 0								
"STOLEN CROPS."									
Cabbages, . . .	0 0 10	August, . .	—	30 lbs., . .	—	4 0 0	—	—	

(Signed),

JOHN RODGERS, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

5th January, 1855.

JOHN BLACKET, Manager.

19. PILTOWN ORDINARY AGRICULTURAL SCHOOL, Co. Kilkenny.

January 5, 1855.

Agricultural Instruction is given in the school-room daily, for the space of half an hour, to a class of twenty pupils. The course of instruction consists of the elements of scientific agriculture, combined with the practical details of farm operations.

The "Industrial Class," which at present consists of eight pupils, receives instruction with the agricultural class, of which it forms a part; and I am happy to be able to state that I am perfectly satisfied with their diligence and attention, both to their studies in school, and to their work on the farm.

It is gratifying to the patron and friends of this institution, as well as to myself, that while the pupils are making respectable progress in the knowledge of the improved system of agriculture, they are also progressing favourably in their literary instruction. Of the eight pupils in the "industrial class" last year, six have received situations—four as farm servants, for which they were well qualified by their previous training here, one as shop assistant, and one as pupil-teacher in the Clonmel Model Schools.

Model Farm.—Since November last, the model farm has been increased from 6A. 2R. 2P., statute measure, to 8A. 2R. 18P. One acre of the recent addition is in preparation for being laid down to permanent pasture, as a paddock for the cows, on which they will be turned out for the space of three or four hours daily.

It being now four years since I took charge of this farm, I have just completed the course of the rotation; and, as I anticipated in last year's report, the results of the past year's cultivation have been attended with greater pecuniary profit than those of any previous year. The profits arising from the farm last year were £17 7*s.* 10*d.*, this year they are much increased, being £24 15*s.* 4½*d.*, or nearly £4 per statute acre. As I am still determined to adhere to the four-course shift, each of the divisions will be enlarged.

The farm being now in an improved state, and as I will have no further heavy expenditure, I will be enabled to devote all my energies to carrying out the objects for which this institution was established.

Live Stock and Dairy Management.—The stock at present on the farm consists of two cows, one calf, two pigs, and one donkey. The cows are house-fed throughout the year, and, although I have kept only two cows, the returns from the dairy are most favourable, being £15 18*s.* 8*d.*, besides rearing a calf and feeding pigs. The cattle receive the same kind of treatment which I detailed in last year's report, so that I need not again repeat it here.

Manures.—The manure principally used on the farm is obtained from the live stock; the liquid being carefully preserved, and absorbed by rich vegetable mould, and then mixed with the straw and litter of the piggery and cow-house. From the favourable results which attended the application of ground bones last year, and of which I reported the experiments in last year's report, I used them in conjunction with farm-yard dung, to all my green crops this year, and from the results, I have every reason to be satisfied with their efficiency as an auxiliary manure; but I would not recommend their application *alone* for the production of a crop, unless the land was in a comparatively fertile state. The bones were used in a fermented state, and mixed with two or three times their bulk of ashes or vegetable mould.

Progress of Agriculture in this locality.—That agriculture is progressing favourably in this locality is evidenced by the improved breeds of cattle, and the large extent of ground under green fallow

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Piltown Model Farm.

crops. The same active agents that I mentioned last year are in full operation for carrying out the improvement of the district.

I would beg to submit the following returns of stock and crops in this locality for 1854:—

Stock.	1854.	1853.	Increase.	Decrease.
Horses,	569	547	22	–
Bulls,	40	45	–	5
Cows,	2,524	2,396	128	–
Two-year olds,	274	208	66	–
Yearlings,	657	566	91	–
Calves,	1,099	1,209	–	110
Sheep,	1,069	760	309	–
Lambs,	634	476	158	–
Pigs,	3,888	2,268	1,620	–
Crops.	A. R. P.	A. R. P.	A. R. P.	A. R. P.
Potatoes,	892 2 3	803 1 28	89 0 15	–
Turnips,	648 0 0	733 3 4	–	85 3 4
Mangels,	114 0 0	127 3 24	–	13 3 24
Carrots,	4 3 18	4 3 17	–	–
Parsnips,	3 0 0	4 3 17	–	1 3 17
Cabbages,	53 1 32	71 1 3	–	17 3 11
Clover,	66 2 8	48 2 15	17 3 33	–
Grasses, sown,	843 3 13	1,098 0 37	–	254 1 24
Meadow & pasture,	13,224 1 14	11,339 2 10	1,884 3 4	–
Wheat,	633 1 24	498 3 24	134 2 0	–
Oats,	2,231 3 34	2,501 0 18	–	269 0 24
Vetches,	16 3 18	12 3 3	4 0 15	–
Barley,	140 3 28	176 2 9	–	35 2 21

In comparing the above returns, it will be seen that there is a great increase in the stock of this year as compared with last, especially cows, sheep, lambs, and pigs. There is a falling off in the extent of ground under turnips, mangels, and cabbages; but there is a corresponding increase in the extent under potatoes, clover, vetches, and pasture. On the whole, the extent of manured fallow crop this year is nearly equal to that of last, while the extent of vetches, clover, and meadow is much greater. There is a considerable decrease in the quantity of grain cultivated; but, at the same time, it will be observed that the culture of the better variety (wheat) is increasing; no bad indication of the improving condition of the soil.

The school gardens are still continuing to hold a prominent position among the various agencies instituted for the improvement of the youth of this district. From the beneficial results of the last year, I have been induced to enlarge the plots for the coming year. Being fully impressed with the usefulness of this important branch of industrial education, I am determined in future to devote more of my time and attention to its working.

From the fact of most of the cottagers and villagers here having a small plot of ground, varying from a quarter to half an acre, attached to their dwellings, this system of training will be most useful to the pupils now and in after life, as it will enable them to cultivate their little gardens to the greatest advantage, and enable them to live more respectably and comfortably.

Were it not for the kind and liberal attention of my noble patron, the Right Honourable the Earl of Bessborough, and his much respected agent, J. Blacket, Esq., to whom I beg to tender my grateful thanks, this institution would not be in the favourable position it has now attained.

Robert S. Cunningham, Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Piltown Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	59	2	10
" Paid for Labour,	12	2	6
" Free Labour of Pupils,	9	7	6
" Paid for Farm Seeds,	3	14	8
" " Manures,	2	2	0
" " Cattle,	2	10	0
" " Feeding Stuffs,	—		
" " Implements and Repairs,	4	17	11
" " One year's Rent of Farm,	8	13	0
" " " Poor Rate (not yet called for),	—		
" " " County Cess,	0	11	5½
To Profit and Loss for balance, being gain on the year,	24	15	4½
	£127	17	3

Cr.	£	s.	d.
By amount received for Grain,	14	18	1
" " Roots, &c.,	16	9	5
" " Cattle Sold,	7	12	6
" " Dairy Produce,	15	18	8
" " Eggs and Poultry,	0	10	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	72	8	7
	£127	17	3

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Piltown Model Farm.

TABLE showing the CROPPING of the Piltown Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Mangels, ...	0 2 0	3rd May, . .	11th November, .	4 lbs., . .	25 tons, 7 cwt.,	13 19 0	7 3 6	—	
Turnips, ...	0 2 23	16th May, . .	18th November, .	3½ lbs., . .	24 tons, 3 cwt.,	11 6 9	6 15 6	—	
Carrots, ...	0 0 16	25th March, . .	2nd November, .	7 lbs., . .	17 tons, 5 cwt.,	18 3 4	16 6 8	—	
Parsnips, ...	0 0 8	25th March, . .	2nd November, .	7 lbs., . .	10 tons, . .	19 3 4	14 3 4	—	
Potatoes, ...	0 1 9	11th March, . .	7th October, . .	73 cwt, . .	13 tons, 2 cwt.,	17 12 2	17 6 6	—	
GRAIN.									
Wheat, ...	1 0 33	10th December, 1853,	26th August, . .	12 stones, .	—	4 6 9	7 9 11	—	
Oats, ...	0 3 30	25th March, 1854, .	2nd September, .	14 stones, .	—	4 3 2	5 15 11	—	
GRASS.									
Italian and Perennial grasses, and red clover,	1 0 30	Sown in March, 1853, with wheat,	Made into hay 17th June. Second crop soiled, .	8 lbs. red clover, and 1½ bushels of grasses,	3 tons, 5 cwt..	2 17 9	5 4 9	—	
Total, . .	4 3 29								
"STOLEN CROPS."									
Vetches, succeeded by Turnips, . .	0 1 33	October, 1853, . June and July, .	Soiled May and June, . .	12 stones mixed with 2 stones of wheat,	16 tons, . 15 tons, .	3 19 0	3 11 0	—	
Rape, ...	0 1 0	August, 1853, .	March and April.	—	—	—	—	—	
Cabbages, succeeded by Mangels, . . .	0 1 0								
	0 2 23								

(Signed), ROBERT S. CUNNINGHAM, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

5th January, 1854.

JOHN BLACKET, Manager.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Piltown Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	59	2	10
„ Paid for Labour,	12	2	6
„ Free Labour of Pupils,	9	7	6
„ Paid for Farm Seeds,	3	14	8
„ „ Manures,	2	2	0
„ „ Cattle,	2	10	0
„ „ Feeding Stuffs,	—		
„ „ Implements and Repairs,	4	17	11
„ „ One year's Rent of Farm,	8	13	0
„ „ „ Poor Rate (not yet called for),	—		
„ „ „ County Cess,	0	11	5½
To Profit and Loss for balance, being gain on the year,	24	15	4½
	£127	17	3

Cr.	£	s.	d.
By amount received for Grain,	14	18	1
„ „ Roots, &c.,	16	9	5
„ „ Cattle Sold,	7	12	6
„ „ Dairy Produce,	15	18	8
„ „ Eggs and Poultry,	0	10	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	72	8	7
	£127	17	3

TABLE showing the CROPPING of the Piltown Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Mangels,	0 2 0	3rd May,	11th November,	4 lbs.,	25 tons, 7 cwt.,	13 19 0	7 3 6	—	
Turnips,	0 2 23	16th May,	18th November,	3½ lbs.,	24 tons, 3 cwt.,	11 6 9	6 13 6	—	
Carrots,	0 0 16	25th March,	2nd November,	7 lbs.,	17 tons, 5 cwt.,	18 3 4	16 6 8	—	
Parsnips,	0 0 8	25th March,	2nd November,	7 lbs.,	10 tons,	19 3 4	14 3 4	—	
Potatoes,	0 1 9	11th March,	7th October,	73 cwt,	13 tons, 2 cwt.,	17 12 2	17 6 6	—	
GRAIN.									
Wheat,	1 0 33	10th December, 1853,	26th August,	12 stones,	—	4 6 9	7 9 11	—	
Oats,	0 3 30	25th March, 1854,	2nd September,	14 stones,	—	4 3 2	5 15 11	—	
GRASS.									
Italian and Perennial grasses, and red clover,	1 0 30	Sown in March, 1853, with wheat,	Made into hay 17th June. Second crop soiled,	8 lbs. red clover, and 1½ bushels of grasses,	3 tons, 5 cwt.,	2 17 9	5 4 9	—	
Total,	4 3 29								
"STOLEN CROPS."									
Vetches, succeeded by Turnips,	0 1 33	October, 1853, June and July,	Soiled May and June,	12 stones mixed with 2 stones of wheat,	16 tons, 15 tons,	3 19 0	3 11 0	—	
Rape,	0 1 0	August, 1853,	March and April.	—	—	—	—	—	
Cabbages, succeeded by Mangels,	0 1 0								
	0 2 23								

(Signed), ROBERT S. CUNNINGHAM, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

5th January, 1854.

JOHN BLACKET, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Ratoath Model Farm.

20. RATOATH ORDINARY AGRICULTURAL SCHOOL, County Meath.

Agricultural Boarders.—There are none specially entered in this department; but of thirty other boarders, seventeen receive agricultural instruction, who, with seven day pupils, make twenty-four; showing an increase of twelve in the agricultural class over last year. The boys in this class receive daily instructions in the various subjects of improved husbandry, to which they pay the utmost attention. They are not only willing, but most anxious to work, there being no instance of either a boarder or day pupil refusing to assist in the farm operations.

The Farm.—The crops were fair, and the profits remunerative, as may be seen by the balance sheet. I cannot say that there is any thing peculiar in my mode of cultivation, as I only adhere steadily to the rules which are generally successful in the neighbourhood.

Live Stock.—The cows and calves are house-fed from the first of November to the first of May, on mangel, turnips, rape, cabbages, and hay, and always kept in prime condition. The stock being necessarily large, and the farm being small, it would be impossible to house-feed the cows in summer, and I am, therefore, obliged to take pasturage. I have the advantage of being supplied with the choicest grass, very near the house, at a moderate expense. The produce of the dairy is all used in the house by the resident pupils, and the supply is always equal to the large demand. The pigs are fed on potatoes, mangel, turnips, cabbage, and the refuse of the kitchen.

The Manure is collected in winter from the cow-house and piggery; during the summer the weeds are carried home, and mixed and covered up with earth. There is a proper receptacle now constructed for the manure which does not allow a particle to escape.

Permanent Improvement.—A cow-house has been built this year in a convenient place, capable of accommodating eight beasts.

This neighbourhood exhibits a decided improvement in agriculture; but I should not attribute too much of the merit to myself. However, I can say with confidence that all the boys attending this school show an evident taste for improved husbandry.

THOMAS GILLIE, Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ratoath Model Farm.

TABLE showing the CROPPING of the Ratoath Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes, ...	1 1 22	March, . . .	October, . .	12 cwts., .	28 barrels, .	5 10 2	7 6 9	—	
Mangels, ...	0 2 1	May, . . .	November, . .	3 lbs., . .	12 tons, . .	2 15 4	3 1 11	—	
Turnips, ...	0 0 19	May, . . .	December, . .	3 lbs., . .	16¾ tons, . .	2 6 4	0 14 6	—	
Garden, ...	0 1 15	Different, . .	—	—	—	—	1 0 0	—	
GRAIN.									
Oats, ...	1 3 5	March, . . .	August, . . .	12 stones, .	14 barrels, 8 st.,	4 1 0	12 18 6	—	
GRASS.									
Meadow, . . .	2 3 33	—	July, . . .	—	22 cwt., . .	1 16 9	5 18 9	—	
Total, . .	7 0 15								

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

16th December, 1854. (Signed), P. SHERIDAN, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Kilskyre Model Farm.

21. KILSKYRE ORDINARY AGRICULTURAL SCHOOL, County Meath.

January 8, 1855.

Agricultural Instruction.—A class, varying from twenty to fifty boys, has been instructed during the year, on the most useful principles of practical and theoretic agriculture; and the progress effected in this department of their instruction is pretty fair, considering their capabilities, all being young.

"*The Industrial Class*," paid by the Commissioners, continues to give satisfaction. Several parents ask it as a particular favour to have their children admitted when vacancies occur. This desire is chiefly evinced by the poorer classes, who admit that such remunerative aid, little as it may be, tends to prolong their attendance at school.

The noble proprietor, the Earl of Fingall, appreciating the merits of such industrial training, has kindly promised an annual contribution of £5, from which the most beneficial results may be anticipated.

The Agricultural Class is steadily increasing, as compared with the previous years. The number of boys attending the school is now very large, from 90 to 100 daily, whose attention to study in literary, as well as agricultural pursuits, still warrants the approbation of the Inspector, Mr. Hunter, who reported very favourably at his last examination, when he visited the model farm, and expressed himself highly gratified with the appearance of the different crops, and mode of treatment.

Model Farm.—The farm now presents a rich and fertile appearance, far surpassing the expectations of its most sanguine friends. The Italian rye-grass is greatly admired for its luxuriant appearance, being now (8th January) fully fourteen inches high. The oat crop grew to such a degree before getting into ear, that if I did not get the top cut off, the whole would lodge, and turn out quite unprofitable. These facts show that our system, when judiciously exercised, is capable of improving to an extraordinary degree, the very worst description of land, as this little farm had been, prior to its coming into my possession. The green crops were good, particularly the mangels and turnips, as will be seen from the accompanying return of statistics and cropping. The potatoes, though attacked by the prevalent disease, were exceedingly beneficial.

Live Stock.—There are at present one cow, one three-year old heifer, two two-years old, and one calf, all my own rearing; together with two pigs, which will be fed from the produce of the farm, with the addition of one and a-half tons of hay and two of turnips. That the advantages of this management may be understood, I should notice that, in the early part of the present summer, I received the sum of £26 5*s.* for a three-year old heifer in calf, purchased by P. J. Kearney, Esq., J.P., Milltown House, whose judgment and knowledge of stock are universally recognised. I purchased two cows in October, 1853, for £17 7*s.* 6*d.*, and sold them the following May for £26 10*s.*

Manures.—In consequence of feeding a large number of stock, in proportion to the extent of the farm, there is, at all seasons, an abundance of farm-yard manure, which is applied in the usual way for green crops. I also top-dress the grass-plot after the first cutting, producing thereby as abundant a second crop as the first. Hence the advantage of having an ample supply of manure.

Permanent Improvements.—There have been no permanent improvements of any account effected this year; Mr. Brogan being of opinion that the most required at present is that of the farm-yard and cow-shed, which I hope to accomplish next summer.

APPENDIX I. — II. Appendix to Dr. Kirkpatrick's Report. — *Kilskyre Model Farm.*

Progress of Agricultural Improvement.—Any person acquainted with this locality, and recollecting its neglected and imperfect cultivation in former years, cannot fail to discover a marked improvement in the general superiority of the crops, and the extensive adoption of green crop tillage, which may be considered as the ground-work of this favourable change, inasmuch as it furnishes the best and only supply by which the land may be renovated, and thus rendered fit to repay the expense of its tillage.

In conclusion, I beg to return my most sincere thanks to the Right Honourable the Earl of Fingall, for his lordship's kind and generous contribution, which will greatly promote the usefulness of the industrial class, and the permanent prosperity of the agricultural department.

EDWARD CLARKE, Teacher.

[SUMMARY, &c.

APPENDIX F.

II. Appendix to Dr. Kirkpatrick's Report.

Kilskyre Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	84	0	0
" Paid for Labour,	6	4	2
" Free Labour of Pupils,	5	0	0
" Paid for Farm Seeds,	1	8	4
" " Manures,	—		
" " Cattle,	18	17	3
" " Feeding Stuffs,	7	0	2
" " Implements and Repairs,	—		
" " One year's Rent of Farm,	2	5	0
" " " Poor Rate,	—		
" " " County Cess,	0	2	0
To Profit and Loss for balance, being gain on the year,	32	9	2
	£157	6	1

Cr.	£	s.	d.
By amount received for Grain,	5	16	0
" " Roots, &c.,	—		
" " Cattle Sold,	72	2	6
" " Dairy Produce,	0	16	2
" " Eggs and Poultry,	0	13	5
" of Dairy Produce as used by family,	5	10	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	72	8	0
	£157	6	1

TABLE showing the CROPPING of the Kilskyre Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes, . . .	0 0 35	Middle of March, .	From 15th July till used,	12½ cwt., .	3½ tons, . .	7 0 0	5 5 0	—	Valued at £3 10*s.* per ton.
Cabbages, . . .	0 0 10	End of March, .	From July to Christmas,	Not ascertained.					
Mangels, ...	0 0 30	1st week in May, .	1st week in Nov., .	4 lbs., . .	20 tons, . .	4 10 0	15 10 0	—	Valued at 20*s.* per ton.
Turnips, ...	0 1 15	1st week in June, .	From Oct. till used,	5 lbs., . .	18 tons, 15 cwts.,	5 0 0	10 0 0	—	Valued at 16*s.* per ton.
GRAIN.									
Oats, ...	0 3 10	1st week in March, .	1st week in Sept., .	8 stones, .	10 barrels, .	2 10 0	6 10 0	—	Valued at 15*s.* 6*d.* per barrel, and value of straw included.
GRASS.									
Italian rye-grass and clover,	0 3 10	1st week in March, .	1st cutting in end of May, and 2nd in August,	3½ bushels rye-grass, and 9 lbs. Clover,	4½ tons, . .	1 10 0	9 15 0	—	Two cuttings included and valued at £2 10*s.* per ton.
Total, . .	2 1 30								
"STOLEN CROPS."									
Cabbage seeds, . .	0 0 6	End of July, . .	Transplanted Nov.,	10 lbs., . .	Not known, .	Not ascertained.	—	—	After potatoes.
Total, . .	0 0 6								

(Signed), EDWARD CLARKE, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 12, 1855.

PATK. KELLY, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Clonmellon Model Farm.

22. CLONMELLON ORDINARY AGRICULTURAL SCHOOL, Co. Westmeath.

January 6, 1855.

Agricultural Instruction.—The number of pupils in the agricultural class at present is eighteen, all of whom are most anxious to attend to agricultural instruction, and willing to assist at such operations on the farm as they are able to perform. Were an "industrial class," as recommended by the agricultural Sub-Inspector, established here, a more regular attendance of those boys would be secured, and, thereby, a more extended knowledge of the principles and practice of improved husbandry be acquired by them. I have every reason to hope that this defect will be remedied without loss of time.

Model Farm.—All my crops are more than usually productive. In an especial manner the potatoes (chiefly "Scotch Downs") were nearly all sound, and of superior quality; there being only about five cwt. damaged in upwards of three tons and a-half. The oats and grass were likewise very successful. The only crop of which I can complain is the turnips, which turned out very uneven. This failure I attribute, in a great measure, to the drills having been made very shallow to receive the manure, and raised very high in covering it; a plan I will be careful to avoid in future.

Live Stock and Dairy Management.—My live stock at present consists of only one cow, having lately sold a heifer, as I saw many die of disease. It is only now that I find it convenient to take in store pigs, not having a properly enclosed yard. I have nothing of interest to say on my dairy management, as all the milk and butter are used by my family.

Manures.—The soil on the division intended to be manured this year being of a moory kind, I am making up the manure heap with upland earth, instead of peat-mould. The whole will be turned, broken fine, and thoroughly mixed, previous to being carted to the field. No extraneous manures are used.

Permanent Improvements.—Under this head I have to notice that nearly forty perches of ditch were cleaned and deepened, from which a large quantity of valuable manure has been procured; fifteen perches of boundary fence are being newly made, and much has been done to effect an egress for superfluous water from one division of this farm.

Progress of Agricultural Improvement.—The comparative success which attended the potato crop for the last two years, has caused a considerable drawback in the cultivation of other green crops in this locality. At the same time, such as do sow turnips, mangels, and carrots, pay due attention to the preparation of the soil for the crop, as well as to the after-culture. This is especially the case with those small cultivators who have their sons attending my school, and who endeavour to imitate the operations on the model farm.

Concluding Observations.—The average rate of wages, as exhibited in my return, is considerably above the standard here, as I had seldom occasion to employ labourers, except in the reaping time, when wages was even up to twenty-six pence a-day. The light work on the farm was all done by the boys of the "agricultural class." The bad state in which part of the boundary fence has hitherto been, prevented me from raising "stolen crops," which might be done with advantage; but, as this defect has been now remedied, I expect, in future, to grow such crops each year. I have not added any thing to the credit of the balance sheet for the permanent improvements now in progress. otherwise my gain on the year would be about £2 more than what I have returned.

MICHAEL M'DERMOTT, Teacher.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Clonmellon Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	43	19	0
„ Paid for Labour,	7	10	0
„ Free Labour of Pupils,	2	4	8
„ Paid for Farm Seeds,	2	10	6
„ „ Manures,	—		
„ „ Cattle,	—		
„ „ Feeding Stuffs,	—		
„ „ Implements and Repairs,	—		
„ „ One year's Rent of Farm,	7	15	6
„ „ „ Poor Rate,	0	7	4
„ „ „ County Cess,	0	5	1½
To Profit and Loss for balance, being gain on the year,	6	18	11
	£71	11	0½

Cr.	£	s.	d.
By amount received for Grain,	10	17	5½
„ „ Roots, &c.,	4	5	0
„ „ Cattle Sold,	8	16	0
„ „ Dairy Produce (used by family),	9	14	3
„ „ Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	37	18	4
	£71	11	0½

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Clonmellon Model Farm.

TABLE showing the CROPPING of the Clonmellon Ordinary Agricultural National School Farm for 1854.

rops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips, ...	0 2 22	29th May, . .	December, . .	6 lbs., . .	20 tons, .	2 10 0	11 5 4	—	At 15*s.* per ton.
Mangels, ...	0 0 32	4th May, . .	November, . .	6 lbs., . .	15 tons, . .	2 10 0	11 5 4	—	At 20*s.* per ton.
Potatoes, ...	0 2 24	6th April, . .	November, . .	14 cwt., . .	6 tons, 10 cwt.,	2 10 0	18 6 0	—	At £3 per ton.
Vetches, ...	0 0 38	30th March, . .	—	10 stones, .	—	—	—	—	Used for soiling.
GRAIN.									
Oats, ...	2 2 1½	30th March, . .	September, . .	18 stones, .	9 brls. 9 stones,	1 17 3	5 17 0	—	At 16*s.* per barrel.
GRASS.									
Meadow, . . .	1 1 18¼	—	June, . .	3 bushels Italian Rye-grass, and 8 lbs. red clover,	2 tons, 10 cwt.,	1 11 8	7 3 4	—	At £3 10*s.* per ton.
Total, . .	5 2 15¾								
"STOLEN CROPS."									
Turnips, ...	0 0 16	19th June, . .	November, . .	4 lbs., . .	14 tons, . .	1 10 0	5 10 0	—	Aberdeens, at 10*s.* per ton.

(Signed), MICHAEL M'DERMOTT, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

6th January, 1855.

JAMES DOWLING, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Ballinvally Model Farm.

23. BALLINVALLY ORDINARY AGRICULTURAL NATIONAL SCHOOL and MODEL FARM for 1854.

30th December, 1854.

Agricultural Instruction.—The number of pupils in the agricultural class now amounts to thirty, being an increase of thirteen during the year, almost doubling the number of last year. It includes the most intelligent boys in the school, who are docile and attentive. Their proficiency as attested by different reports of inspectors and visitors is satisfactory.

The industrial class consists of eight boys selected from the agricultural class, and their attendance even in the hardest weather is most punctual. All the manual labour of the farm (except a few days work at harvesting and winter digging) has been performed by them and myself, as I make it a practice to work with them at whatever may be in progress. My aim has been rather to prevent them from over exerting themselves than to stimulate them to exertion. Though a large share of the work was thus performed by unpractised hands, yet it would take a "cultivated eye" to discover any traces of unskilfulness. Besides the useful practice this class affords the pupils, it furnishes an excellent opportunity of moral training, as there was not a single act of deliberate disobedience during the year. In short, it has enabled me to impart a respectable amount of the most useful agricultural knowledge, without that exhausting exertion and intense application otherwise required.

Model Farm.—The same system of cropping (four-course shift) is still adhered to, and its details are carefully carried out. There has been a great improvement in the grain crops this year, which were as heavy as could be desired; and the profit, which is pretty high, belongs entirely to the crops, as part of the stock bought turned out unprofitable. And here I am reminded of a pleasing duty, that of testifying to the liberality of my patron, who refunded me £5, the entire of the expense of repairing the sheds burned last year, so that in a pecuniary way I have been this year particularly fortunate. In order to render the rotation more complete, barley was substituted for oats after manured crops. It proved equally profitable, though being so isolated it suffered severely from the birds; and I am certain it prevented a great loss in the succeeding crop of clover and grass. The general state of the farm continues to please the Agricultural Sub-Inspector, who inspected it twice during the year. I beg leave to add a few extracts from the Daily Report Book. The first is from a report made by a person famous as a first-rate farmer, himself renting land to the amount of £400 per annum; his testimony is of the more weight as he gives by no means an unqualified approval of our system.

> Monday, 10th July.—Visited, fifty-one present. I also inspected the farm and found the various crops most carefully cultivated and attended to, surpassing any I have hitherto seen.
>
> LAWRENCE HEGARTY.

The next is from a person celebrated alike for his agricultural and commercial enterprise.

> October 25th.—I was much gratified at the satisfactory answering of the agricultural class on the rotation of crops, deep cultivation, &c. The little farm was also quite free from weeds.
>
> DAVID MOORE.

The winter vetches and nonpareil cabbages which were got in early in October, are now looking very well; and of the latter crop there is, besides, a supply of plants for spring planting.

The Live Stock are of course house-fed in the usual manner. The roots are given sparingly, and perfectly clean; and the milk and butter produced are of the very best quality. In the dairy produce there has been considerable advancement; but a pig and calf which were bought turned out bad. So in this respect there is room for improvement, and indeed it is the only one in which considerable advancement can now be looked for.

The liquid manure is collected in barrels, sunk in convenient places, or absorbed by earth. Part of it is applied to the grass crop, part to the green crops, and the rest goes to the manure heaps. The gases of the manure heap are preserved by continually covering it with bog-mould, earth, &c. Believing that artificial manures could be applied with great advantage in connexion with compost, &c., so much used in this country, I made an experiment on a very small scale with guano and peat ashes, but as the results were not satisfactory, I will not give the details till I try again.

Agricultural improvement is progressing at such a rate in this district that were it not for the monopoly of house-feeding, I should have but a chance of holding a leading position in the midst of such emulation. Deep and clean cultivation is almost every where to be seen. Every bit of land (with one exception) that I have seen laid down with grass or clover this year, was with the first grain crop after a manured crop. I cannot exactly say what influence this school and farm have on the agricultural progress of this neighbourhood; but if we are allowed to decide from such occurrences as the following, they are not ineffective in this respect:—A tradesman living some two miles distant, and holding a small farm, on showing me some fine moorland plots of mangels and turnips, said that he had been closely examining mine, and that he thought he could compete with me; but, added he, "I may thank your industrial pupil, (a son of his, about eleven years old), as he should have every thing his own way."

In conclusion, I beg leave to remark that the comparatively high attendance during this year is a pleasing indication that the people now coincide in the opinion that the agricultural department increases the general utility of the school. Thus is brought within the reach of the poor an education, the benefits of which the middle class think well of sharing with them, without (I am happy to be able to add) a single objection to united education in any sense of the word; while the gratitude of the poor, often expressed in no measured terms, is equal to their love for learning, so long proverbial.

JOHN LYONS, Teacher.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballinvally Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	25	12	8
„ Paid for Labour,	1	15	4
„ Free Labour of Pupils,	3	16	6
„ Paid for Farm Seeds,	2	3	2
„ „ Manures,	0	1	8
„ „ Cattle,	12	10	0
„ „ Feeding Stuffs,	1	13	6
„ „ Implements and Repairs,	0	12	4
„ „ One year's Rent of Farm,	2	0	0
„ „ „ Poor Rate,	—		
„ „ „ County Cess,	0	3	8
To Profit and Loss for balance, being gain on the year,	11	19	10
	£62	8	8

Cr.	£	s.	d.
By amount received for Grain,	7	0	7
„ „ Roots, &c.,	4	15	0
„ „ Cattle Sold,	13	4	0
„ „ Dairy Produce,	10	8	1
„ „ Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	27	1	0
	£62	8	8

TABLE showing the CROPPING of the Ballinvally Ordinary Agricultural National School Farm for 1854.

Crops cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Mangels,	0 0 20	6th May,	November,	6 lbs.,	22 tons,	11 10 0	11 12 0	—	
Aberdeens,	0 0 20	24th June,	October,	5 lbs.,	28 tons,	8 8 6	6 8 6	—	
Swedes,	0 0 18	5th June,	December,	5 lbs.,	22 tons,	9 15 0	7 15 0	—	
Potatoes,	0 0 25	15th April,	October,	4 barrels,	7 tons,	11 7 0	13 3 0	—	
Cabbages,	0 0 12	—	—	—	—	—	—	—	Planted and used in succession during the year.
GRAIN.									
Barley,	0 2 15	8th April,	End of August,	10 stones,	10 barrels,	3 17 0	5 3 0	—	
Oats,	0 2 10	15th March,	15th September,	17 stones,	12 barrels,	3 18 0	5 2 0	—	
GRASS.									
Clover and Italian rye-grass,	0 2 15	8th April,	From May to Oct.,	1 stone clover, 1 bush. rye-grass	Not ascertained,	—	—	—	
Vetches,	0 0 5	21st June,	October,	12 stones,					
Total,	2 1 20								
"STOLEN CROPS."									
Winter Vetches,	0 0 16	5th October,	June.	—	—	—	—	—	
Cabbages and rape,	0 0 6	—	—	—	—	—	—	—	
Total,	0 0 22								

(Signed), JOHN LYONS, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

6th July, 1855.

CHARLES WM. HAMILTON, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Delgany Model Farm.

24. DELGANY ORDINARY AGRICULTURAL SCHOOL, Co. Wicklow.

6th January, 1855.

Agricultural Instruction.—There are no "Boarders" as yet, nor "Industrial Class," except two paid by the teacher. The "Agricultural Class" comprises all who read the third, fourth, and fifth books, some of whom acquitted themselves very respectably at the examination held last July, by Mr. Brogan, the Agricultural Sub-Inspector. They also gave much satisfaction in the diligence with which they work on the farm, in fact more than might be expected, as the parents, with very few exceptions, give but little encouragement to such training.

The number at present attending this school is not as great as heretofore; nor can it be expected, as three schools have recently been established in the adjacent neighbourhood, two of which are in connexion with the "National Board," which has had the effect of diminishing the attendance at this school. There are thirty-two at present on the rolls of this class, but the attendance is fluctuating.

Model Farm.—The rotations and details of the cropping pursued having, in my previous Reports, been minutely described, I do not deem it necessary at present to particularize them. I may just remark that from the success which, for the past year, has attended our potato crop in remaining almost perfectly sound, it may be worth suggesting to others our mode of treatment. The planting was executed in our usual way, according to the most approved mode of spade husbandry—the only peculiarity occurred in the after culture. Instead of the common practice of levelling the crowns of the drills, and again moulding up the plants, we let them remain as they were sown, with the exception of stirring and loosening the soil, to keep it free from weeds, consequently we not only had a better crop, but also, we trust, a much safer seed for the reproduction of this most essential vegetable.

The plot intended for maugel was ploughed early in October, and the greater part of it planted with cabbages, which yielded a pretty fair crop by the first of May, and served materially at that season, when feeding is generally scarce. I have been told that some of my neighbours consider I do not intend to remain a long time to cultivate this farm, as they considered I was exhausting the soil by such constant cropping; though, it must be admitted that a clearly perceptible improvement is being effected, both in the appearance and condition of the soil. The produce would be greater but for the great drought of the past year, which has been very unfavourable to the successful growth of both *grass* and *green crops.*

Live Stock.—The live stock at present consists of three cows, one heifer, and one pig. These are all house-fed for half of the year; during the summer and autumn months one cow is put out to grass, for which the farm is debited in the year's account. It may be seen by the "Statistical Returns" that *dairy produce* has been my greatest source of profit; and even so much could not have been realized but by a ready sale for new-milk, having had a contract for thirty quarts per day, at 2*d.* per quart.

The house-fed cows maintained a much better condition, and milked more regularly than the one on pasture, though on first-rate grass, which shows that strict attention must have been given to those so treated.

Manures.—At all times the strictest attention is paid to economizing manure. At every opportunity it is applied to the soil when removing it from the cow-house, &c.; and at other times it is formed into a compost with light layers of soil, which had been previously prepared by being

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Delgany Model Farm.

saturated with liquid manure. When the heap is about four feet high, it is then covered with ashes to prevent the several gases from escaping. The liquid manure is applied to grass or green crops, except in very warm weather, when it is thrown on the compost heap which is always in readiness to receive it. There have been no permanent improvements effected during the past year.

Progress of Agriculture.—That agriculture is rapidly progressing in this locality there can be no doubt. The raising of *green crops*, *autumn ploughing*, and the planting of potatoes at an early season, are much more generally attended to than heretofore. During the past year, a great number of prizes have been awarded at the several shows, to successful competitors of this locality, both for cattle and all kinds of field crops. I have no doubt but this locality may ere long take an advanced position in agriculture; the people becoming more and more alive to improvement in this branch of industry. How far such energy may have been excited by our example, I feel diffident in pronouncing, though from the many inquiries made, and the explanations given to the surrounding farmers, it may be hoped that it is materially aiding in the promotion of the progress referred to. I will beg to submit from the Report Book the remarks of the resident clergyman, who constantly visits, and is intimately acquainted with the working of this school.

I have been attending the National School of Delgany for some years, and am happy to remark every thing to praise and nothing to blame.

PETER SEGRIFF, C.C.

This is a satisfactory testimony in proof of the efficiency of our system, and is valuable as showing that both the agricultural and literary departments can be conducted simultaneously by an efficient teacher without detriment to either.

ANDREW THOMPSON, Teacher.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Delgany Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	74	10	4
„ Paid for Labour,	2	2	10
„ Free Labour of Pupils,	16	16	0
„ Paid for Farm Seeds,	1	14	3
„ „ Manures,	0	5	0
„ „ Cattle,	13	2	6
„ „ Feeding Stuffs,	11	8	0
„ „ Implements and Repairs,	0	17	10
„ „ One year's Rent of Farm,	6	8	0
„ „ „ Poor Rate,	—		
„ „ „ County Cess,	0	5	10
To Profit and Loss for balance, being gain on the year,	20	13	4
	£148	3	1

Cr.	£	s.	d.
By amount received for Grain,	9	15	10
„ „ Roots, &c.,	1	16	1
„ „ Cattle Sold,	8	18	0
„ „ Dairy Produce,	40	10	5
„ Eggs and Poultry,	0	19	10
„ Potatoes used in family,	9	0	0
„ Butter and Milk, „	6	5	0
„ Vegetables, „	1	6	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	69	12	9
	£148	3	11

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II. Appendix to Dr. Kirkpatrick's Report.

Delgany Model Farm.

TABLE showing the CROPPING of the Delgany Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 1 20	January & February,	June and October,	12 cwts.,	12 tons,	12 0 0	36 0 0	—	
Mangels,	0 3 0	April and May,	November,	5 lbs.,	26 tons,	12 0 0	14 0 0	—	
Turnips,	0 1 15	June,	December,	4 lbs.,	30 tons,	10 0 0	14 0 0	—	
Parsnips,	0 0 5	February,	December,	2 lbs.,	8 tons,	12 0 0	36 0 0	—	
GRAIN.									
Wheat,	1 1 0	February,	August,	10 stones,	7½ barrels,	4 10 0	9 0 0	—	
GRASS.									
Clover & Italian Rye-grass,	1 1 0	May,	From 16th May, through October,	8 lbs. clover, 4 bush. Ital. rye,	24 tons,	5 0 0	7 0 0	—	
Total,	4 0 0								
"STOLEN CROPS."									
Cabbages,	0 1 20	October,	April,	16,000 plants,	—	7 0 0	15 0 0	—	
Vetches,	0 1 0	October,	June,	10 stones,	30 tons,	4 0 0	8 0 0	—	
Total,	0 2 20								

(Signed), ANDREW THOMPSON, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 8, 1855. ROBERT H. PENNICK, Manager.

Cappaduff Model Farm.

25. CAPPADUFF ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Mayo.

1st January, 1855.

Agricultural Class.—This class is composed of fifteen pupils, selected chiefly from the third and fourth classes, who receive instruction both in the theory and practice of agriculture. They perform some of the light work on the farm, such as thinning, weeding, &c. There has been an increase of five boys in this class during the season, and I expect it will shortly be up to twenty.

Industrial Class.—This class consists of six young lads, varying from twelve to sixteen years of age, selected from the most deserving of the agricultural class, such as those who exhibit a taste for agricultural pursuits. It gives me much gratification to state that they do the greater part of the work of the farm, and that an avidity is evinced by them to arrive at a thorough knowledge of the practical details of improved husbandry.

Model Farm.—The cropping this season was highly successful, and the produce unusually large. The potatoes which were sown early in March exceeded my most sanguine expectations. Jeremiah Nunn, Esq., (Lord Plunket's agent), declared they were the best he had seen in his travels during the season. The oats, in like manner, was much better both in quantity and quality, than the average yield of the surrounding districts. I sold some of it in Westport, and got the highest price that was given there this season. The farmers here are prone to a great many errors as regards their mode of cultivation; one is, that of keeping seed oats for three or four years, without a change, the result of which this year was, that their grain crops were nearly all blighted; another is, that of not sowing their potatoes until May, so that the tubers are quite delicate when the disease sets in, and consequently being unable to resist its virulent attack, are completely destroyed. A great scarcity of the above esculent is felt in this locality from the circumstances mentioned.

Live Stock.—In consequence of the loss of the two cows referred to in my last Report, this still presents a discouraging feature. I had no capital to replace them, and it was not till November last that I was enabled to purchase even *one*. I now have one cow, a three-year-old heifer, together with six sheep, and ten lambs;—these latter I cannot graze on the farm next summer, as there will not be sufficient pasture for them; I will therefore be obliged to pay a neighbouring farmer for their grazing. The produce of the dairy, which was unavoidably small, was consumed in the house.

Manures.—The manure heap is kept constantly covered with peat-mould, and cleansing of roads; some mould is also kept behind the cattle in the shed. The liquid manure is carefully preserved, channels being made from the cow-house to the tank, where it is suffered to remain till sufficiently fermented, and it is then applied in the ordinary way.

Permanent Improvements effected during the year.—The bog part of the farm, alluded to in my last Report, has been all thorough drained, and a large dyke cleaned out, which answers as a main drain running along the south-eastern part of the farm. I expect this portion will produce a good green crop next season (1855).

Progress of Agriculture in this Locality.—There are two or three farmers in my immediate vicinity who house-feed their cattle constantly; some also grow green crops; but I cannot say that they have been influenced by the example afforded them on this model farm, although it is since its establishment they have begun to do so.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Cappaduff Model Farm.

Concluding Observations.—The principal difficulty I have had to contend with in my exertions to render this *farm* more profitable and systematic lies in the deplorable want of any thing even approaching commodious farm offices. This I trust I shall be able to obviate before a distant period, and the obstacle once surmounted, I anticipate no cause that can materially operate against the *rapid* improvement of this little farm.

P. J. NORRIS, Teacher.

[SUMMARY, &c.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	30	1	0
„ Paid for Labour,	6	8	2
„ Free Labour of Pupils,	5	7	4
„ Paid for Farm Seeds,	1	18	0
„ „ Manures,		—	
„ „ Cattle,	20	9	6
„ „ Feeding Stuffs,		—	
„ „ Implements and Repairs,	0	12	6
„ „ One year's Rent of Farm,	2	7	0
„ „ „ Poor Rate,	0	13	7
„ „ „ County Cess,	0	6	5
To Profit and Loss for balance, being gain on the year,	6	11	4
	£74	14	10

Cr.	£	s.	d.
By amount received for Grain,	5	0	0
„ „ Roots, &c.,	5	16	0
„ „ Cattle Sold,	5	15	0
„ „ Dairy Produce*,		—	
„ „ Eggs and Poultry,		—	
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	58	3	10
	£74	14	10

* The dairy produce does not appear in the Balance Sheet, as it was consumed by my family; as also eggs, poultry, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Cappaduff Model Farm.

TABLE showing the CROPPING of the Cappaduff Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes, ...	1 0 0	March, . . .	October, . .	84 stones, .	8¼ tons, . .	2 10 2	15 5 2	—	* Not including rent, rates, or value of seeds.
Turnips, ...	0 2 0	June, . . .	November, . .	4 lbs., . .	16¼ tons, . .	1 5 1	4 13 4	—	One rood of this crop was sown 3rd of July, with Aberdeen turnips, after a "stolen crop" of winter vetches.
GRAIN.									
Oats, ...	1 0 0	March, . . .	September, . .	15 stones, .	160 stones, .	2 0 2	5 19 10*	—	Laid down with grass seeds and clover.
Oats, ...	1 0 0	March, . . .	September, . .	15 stones, .	96 stones, .	2 0 2	3 17 4*	—	
Total, . .	3 2 0								
"STOLEN CROPS."									
Vetches, ...	0 2 0	October, 1853, .	June and July, .	12 stones, .	Not ascertained.	—	—	—	
Not cropped, ...	0 1 7	—	—	—	—	—	—	—	Not cropped this season (1854), being the bog part alluded to in my Report.
	0 3 7								

(Signed), PETER J. NORRIS, Teacher.

I certify that the foregoing Returns and Accounts are correct according to the best of my knowledge and belief.

January 5th, 1855.

CATHERINE PLUNKETT, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Cornafulla Model Farm.

26. CORNAFULLA ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Roscommon.

January, 1855.

Agricultural Instruction.—It affords me sincere pleasure to state that the boys of the "Agricultural Class" continue to evince an increased earnestness and anxiety to acquire a knowledge of practical agriculture; and though the poverty of their parents, and the scarcity of labour in this locality, have compelled many of them to be absent from the school during long intervals, yet some of them have introduced and executed improvements on the holdings of their parents. The satisfactory results of those improvements have called forth the grateful acknowledgments of the parents, and excited so much attention, as would lead me to hope that further improvements will follow from such encouraging examples.

The obstacles which prevented the formation of an "Industrial Class" in this school having been described in my last Report, it is unnecessary to revert to them here; but now that the Commissioners have kindly modified the conditions of the grant for payment of such a class, so as to adapt them to the peculiar circumstances of this locality, I am preparing an "Industrial Class" to commence working on the farm immediately, and I confidently hope that at the end of the year I will be able to report favourably of their proficiency.

Model Farm.—Having taken a small additional field in January, 1854, the extent of the farm at present is 12A. 2R. 1P. statute measure. The results of cultivation for the past year have been encouraging. As a detailed statement of these results has been given in the "Statistical Returns of Cropping" and "Balance Sheet," it is unnecessary to have a repetition of them here. The acreable produce is certainly below an average, but when the very inferior quality of the soil, and the foul and exhausted state in which it had been when I got possession of it, are taken into consideration, I think it will be readily admitted that a gradual and encouraging improvement has been effected. Early and deep digging—a full exposure of the surface to the beneficial action of the atmosphere during winter—deep ploughing in spring—a complete cleansing and pulverization of the soil—a plentiful and judicious application of manure—careful attention to the after-culture of green crops, and to the rolling and weeding of grain crops,—these constitute the principal features of my farm management. When it is remembered that the sum of £37 12*s.* 7*d.* has been paid for *labour* alone during the past year, I think it will be admitted that the cultivation of my farm has been carefully attended to. The employment given by this expenditure has kept three families, containing nine individuals, from the workhouse. This fact has been frequently noticed and thankfully acknowledged by several ratepayers in my neighbourhood.

Live Stock and Dairy Management.—The live stock kept on the farm during the past year were, two cows, a yearling calf, and three pigs. The cattle are house-fed, well littered, and daily curried throughout the year. The pigs are kept in a large enclosed yard adjoining the piggery, and plentifully supplied with food and litter; a large quantity of valuable manure is thus obtained. The peculiar circumstances of this neighbourhood compel me to feed most of my labourers during the greater part of the year. This circumstance reduces the *receipts* for "Dairy Produce" to a very low figure; but in order to obtain accurate results in this department, the quantity consumed in the house is recorded weekly, and the farm credited at the end of the year for the full amount, as exhibited in the "Balance Sheet."

APPENDIX I.
—
II. Appendix to Dr. Kirkpatrick's Report.
—
Cornafulla Model Farm.

Manures.—This very important department of farm management occupies a considerable share of my care and attention. Without a plentiful and judicious application of manure my farm would be almost worthless, and all other improvements would be comparatively valueless. Peat-mould, road-scrapings, the scourings of ditches, the weeds of the farm, and all vegetable refuse that can be procured, are collected and formed into a heap of compost. When lime cannot be procured, a quantity of limestone gravel is added for the purpose of accelerating the decomposition of the peat-mould. All available means at my disposal are unremittingly employed to increase the quantity of animal manure. According as the latter is produced it is formed into an oblong heap, and carefully covered at the top and sides to prevent the escape of the gases; the heap thus consists of alternate layers of manure and compost; the whole is carefully turned and mixed once or twice before being applied to the land; when carted out it is covered into the land with the least possible delay, in order to prevent the escape of the volatile particles, which, being retained and absorbed by the soil, promote a speedy vegetation.

Permanent Improvements.—The raising and removal of a large quantity of rocks from the field added to the farm in January, 1854, were the only permanent improvements effected during the past year.

Agricultural Improvements are certainly progressing in this locality, though not so extensively as could be desired. Some are so fondly attached to their own opinions, and so prejudiced against innovations, that no example, however encouraging, can induce them to attempt a change. Many readily admit the obvious advantages of improved husbandry, but plead inability to undertake improvements, in consequence of the increased expense consequent thereon, while others start objections which never can be satisfactorily removed until legislative enactments effect a salutary change. Yet, notwithstanding all this, I am happy to state that several have undertaken and are carrying out improvements which will benefit themselves and afford a useful example to their neighbours. I can safely affirm that these improvements have been influenced and promoted by my system of farm management. The benefits arising from my mode of collecting, preserving, and applying manures, are so striking and obvious that many have adopted a similar system, and I trust that the consequence will be a more general imitation in future.

Three of the subjoined testimonials are from resident proprietors in this parish—gentlemen whose approbation of my labours has been frequently expressed in such complimentary and encouraging terms as to induce me to proceed with increased energy and perseverance. The fourth is from a gentleman in Athlone, who has frequently passed through my farm, and appeared highly pleased with the management thereof.

FRANCIS DURNEY, Teacher.

Mount Flinn, Athlone, 11th January, 1855.

DEAR MR. DURNEY,—In reply to yours of the 9th, I have to express my entire approval of the mode you adopted for the improvement of your farm, and can only hope it will prove profitable to you.

I am, dear Mr. Durney, truly yours,
JOHN W. CALLEN.

Mr. F. Durney.

Thomastown Park, 12th January, 1855.

SIR,—For the last few years I have attentively observed the mode of improved cultivation pursued on your model farm in Cornafulla. Your improvements are so remarkable as to impress me with the conviction that an extended imiation of your excellent example would lead to the happiest results. I have requently directed the attention of my tenants to your system of farm management in the hope that they might be induced to imitate it.

I sincerely wish that the profitable recompense of your industry may be commensurate with the ability, energy, and perseverance with which your labours ave been characterised for the last few years.

Your obedient servant.
THOMAS M. NAGHTEN.

Mr. F. Durney.

Johnstown House, January 11th, 1855.

DEAR SIR,—I have had great pleasure during the past year in observing the ontinuance of your judicious and good system of farming, and I must say (as have often said before) that I wish our neighbouring farmers would take xample by you in the cultivation of their land.

It gives me sincere pleasure to be able to bear my testimony to your merit as n agriculturist.

I remain, dear Sir, faithfully yours,
JOHN DILLON, J.P.

Mr. Durney, Schoolmaster, National School.

Athlone, 12th January, 1855.

DEAR SIR,—Having frequently had an opportunity of passing and repassing through your model farm in Cornafulla, and being in no small way interested in its management as regards the growth of root and other seeds, it gives me much pleasure to record my testimony in favour of the very excellent and judicious system of improved agriculture pursued thereon. I was often struck most forcibly by the remarkable contrast it afforded to many of the neighbouring farms; and the conviction was forced on my mind that if the example afforded by such instruction was extensively followed, the national system of education would indeed be a real and substantial benefit to Ireland.

I am, dear Sir, truly yours,
W. E. ABBOTT.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Cornafulla Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	73	0	10
" Paid for Labour,	37	12	7
" Free Labour of Pupils,	3	7	6
" Paid for Farm Seeds,	3	13	2
" " Manures,	0	19	6
" " Cattle,	10	1	0
" " Feeding Stuffs,	0	19	11
" " Implements and Repairs,	0	7	3
" " One year's Rent of Farm,	4	6	8
" " " Poor Rate,	0	6	3
" " " County Cess,	0	18	3
To Profit and Loss for balance, being gain on the year,	16	18	7½
	152	11	6½

Cr.

	£	s.	d.
By amount received for Grain,	41	0	4½
" " Roots, &c.,	5	0	2½
" " Cattle Sold,	13	2	6
" " Dairy Produce,	1	13	6
" " Eggs and Poultry,	1	6	1
" of Dairy Produce used by family,	6	0	10
" Eggs " "	0	15	2½
" Potatoes, " "	11	8	4
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	72	4	6
	£152	11	6½

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Cornafulla Model Farm.

TABLE showing the CROPPING of the Cornafulla Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.	
							Profit.	Loss.
	A. R. P.					£ s. d.	£ s. d.	£ s. d.
GREEN FALLOW CROPS.								
Potatoes,*	1 1 21½	March and 1st week of April,	Middle of October,	9½ cwts.,	4 tons, 8 cwts.,	9 18 1½	5 0 2½	—
Turnips,†	1 2 20½	Middle of June,	Unconsumed part yet in the land,	4 lbs.,	4 tons, 15 cwts.,	9 7 6½	--	5 16 3½
Cabbages,‡	0 1 5⅓	At various times from February to July,	Consumed as required,	Planted in rows 2 feet apart, 15 inches asunder,	Not ascertained,	8 15 10	5 16 8	—
GRAIN.								
Wheat,	1 2 19	16th and 17th November, 1853,	4th and 5th of Sept.,	10 stones,	5 barrels,	3 13 7	6 11 6	—
Oats,	4 3 35⅓	1st and last week of March,	From 11th to 23rd September,	12 stones,	7 barrels,	3 7 6½	2 16 8½	—
GRASS.								
Clover and Rye-grass,§	1 0 1½	28th March, 1853,	Cut for soil from 20th June to 24th October,	3½ bush. rye-grass, 11 lbs. clover,	Weight of what was cut for soil not ascertained,	1 18 7	1 11 5	—
Pasture,	0 3 29	—	Hay saved the beginning of July,	—	Hay saved, 1 ton, 15 cwts.	—	—	—
Total,	11 3 13							
"STOLEN CROPS."								
Winter Vetches, sown in July with Turnips and included in Turnip land,‖	0 0 32	10th October, 1853,	Consumed green,	10 stones, ⅓ rye,	Weight not ascertained,	5 10 4	6 19 8	—

Observations.

* Nearly all sound, but not so productive as in 1853.

† A bad crop, principally owing to the severe ravages of the wire-worm, with which the field in which they were grown is much infested.

‡ The profit on this crop is *estimated* by the quantity of valuable food supplied to cattle and pigs.

§ The profit on this crop is calculated by the quantity of *hay* produced, without reference to the *soil* given to the cattle.

‖ An excellent crop, and excited much admiration and attention. The profit is *estimated* by the same standard as that applied to the third "Observation."

(Signed), FRANCIS DURNEY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

WALTER HUSSEY WALSH, Manager.

6th January, 1855.

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Glanduff Model Farm.

27. GLANDUFF ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Roscommon.

January 11th, 1855.

Agricultural Instruction has been imparted to a class of boys varying from fourteen to twenty-four, none of whom seem unwilling to take part in the field operation.

Model Farm.—The crops on the farm last year were very abundant and far exceeded my anticipation, which affords a convincing proof of the efficiency of the system pursued.

Live Stock.—The cattle on the farm are for the most part of the year house-fed, as such appears to me the most certain way of securing profit.

The Dairy produce has been small in consequence of the cows having been in calf. As I keep two horses, and sometimes three, I deem it advisable to state that some are kept for purposes not connected with the agricultural department, but which I have found to be very profitable, as it contributes greatly to the increase and quality of the manure heap, and leaves, besides, a fair amount of money profit.

The Manure heap is always formed in a sheltered place, and after every fresh increase from the stable and cow-house is carefully coated with peat or earth, mixed twice during the winter, and applied to the field immediately before the seed is planted or sown, in quantity proportionable to its quality, as also that of the soil, and then covered in as speedily as possible.

No purchased manure was needed; but requiring bedding for the cattle, I had to purchase a considerable quantity of straw, which I charged to the farm account.

The Permanent Improvements effected consisted in the construction of boundary fences, farm roads, and garden walks, also subsoiling.

The progress of agricultural improvement in this locality is very fair, and the desire on the part of the farmers in general, in the neighbourhood of the school, to imitate the example of improved husbandry exhibited on the farm, is very apparent; but circumstances, over which the humbler class of farmers has no control, prevent to a great extent the introduction of a regular and systematic course of management.

The grant in favour of an Industrial Class is of the greatest advantage, as it is calculated to remove unfounded objections and establish instead favourable impressions.

JAMES KELLY, Teacher.

P.S.—I also beg leave most respectfully to enclose testimonials of three gentlemen, who are not only experienced agriculturists, but also scientific, two of whom I have solicited to be valuators for this time.

J. K.

I have frequently had occasion to visit the "Glanduff Ordinary National Agricultural Farm" within the past eighteen months, and have this day assisted at the valuation of farm produce, live stock, &c., thereon; and in justice to Mr. James Kelly, agricultural teacher, I must say that the very great improvements he has effected in the appearance of his land latterly, by reclamation, do him much credit. In the more advanced stage of this farm's operations, I have no doubt but it will—aided by the great skill, talent, and energy of its owner (Mr. J. Kelly)—be of incalculable importance in being the means of introducing a more improved system of farming in this neighbourhood, at least among the smaller classes of farmers, whose systems are easiest changed, and most generally found defective.

JOHN M'GRATH,
Land Steward to P. Grehan, Mount Plunkett.

January, 1855.

II. Appendix to Dr. Kirkpatrick's Report.

Glanduff Model Farm.

Having been called upon as valuator by Mr. James Kelly, agricultural teacher, I went through the different items on his farm impartially; and in justice to him I have to say that if his system of husbandry be imitated, the establishing of the Glanduff Ordinary Agricultural National School will be instrumental in removing the exhausting system of farming, and substituting a remunerating one; and I must further add, that the great zeal and ability he has exhibited in carrying into operation such a creditable system of improved culture, has justly deserved for him great applause.

Cartron, January 5th, 1855. JOHN MARTIN.

Kilmore, December 11th, 1854.

DEAR SIR,—I have great pleasure in expressing to you the great satisfaction I experienced on visiting the farm attached to the Agricultural School, Glanduff, and hope that an example of such evident and valuable improvement will be generally imitated by the neighbouring agriculturists, as far as circumstances may permit, as I consider it most desirable and advantageous that they would be induced to relinquish their present mode of cultivation and adopt a course both scientific and remunerative.

I am, your obedient servant,

Mr. Jas. Kelly. B. CURLEY.

[SUMMARY, &c.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	139	15	0	By amount received for Grain,	31	14	9½
" Paid for Labour,	35	12	4½	" " Roots, &c.,	9	10	0
" Free Labour of Pupils,	3	0	0	" " Cattle Sold,	36	3	6
" Paid for Farm Seeds,	3	12	6	" " Dairy Produce,	3	4	10
" " Manures,	5	4	6	" " Eggs and Poultry,	2	15	0
" " Cattle,	8	5	6	By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	166	17	6
" " Feeding Stuffs,	2	3	11				
" " Implements and Repairs,	3	8	10				
" " One year's Rent of Farm,	8	3	4				
" " " Poor Rate,	0	16	6				
" " " County Cess,	1	10	0				
To Profit and Loss for balance, being gain on the year,	38	13	2				
	£250	5	7½		£250	5	7½

TABLE showing the CROPPING of the Glanduff Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	Planted in ridges for the purpose of subsoiling the furrows. A part of which was applied to the stalks when about 12 or 14 inches high, which appeared to me to serve greatly, from the tendency which the tuber of the green top potato has to advance to the surface of the ridge. * A portion of the Aberdeen turnips was sown the same day (14th June) upon which the Swede was sown, and I found it far exceeded the portion sown July 10th, in quantity and quality, though the tops of the former were not half so promising as the latter. The cabbages I could not plant earlier, because of some permanent improvements that were effecting, which could not be conveniently done sooner. The crop was remarkably good in quantity and quality. The grass crop delighted all who saw it, having 3 cuttings. Manure applied after the first. The 1st cutting, 4½ tons; 2nd, 3½ tons; and 3rd, about 2 tons.
Potatoes, . . .	1 2 38	15th March to 25th April, . . .	October, . .	80 stones, .	5½ tons, .	8 10 0	9 10 0	—	
Turnips, { Swede, .	0 2 35	14th June, . .	15th, 16th, & 17th Dec.	4 lbs., .	13 tons, 12 cwt.,	5 15 0	8 5 0	—	
Turnips, { Aberdeen,* .	0 1 15	10th July, . .	15th, 16th, & 17th Dec.	4 lbs., .	15 tons, 5 cwt.,	5 0 0	8 0 0	—	
Cabbages, . . .	0 0 20	20th April, . .	Occasionally, . .	5,240 plants, .	Not weighed, .	Not ascertained.	—	—	
Onions, . . .	0 0 4	22nd March, . .	Occasionally, . .	10 lbs., . .	Not weighed, .	Not ascertained.		—	
Parsnips, . . .	0 0 4	20th March, . .	Occasionally.	—	—	—		—	
Vetches, ...	0 2 35	{ 10th March to 10th April, . }	Occasionally, . .	10 stones, .	Not ascertained,	1 5 0	{ Estimated, 4 10 0 }	—	
GRAIN.									
Oats, ...	4 2 30	17th March to 5th April, . . .	September, . .	14 stones, .	14 barrels, .	1 7 6	10 15 0	—	
GRASS.									
Grass, ...	2 0 29	20th April, .	{ July 15th, and 2 cuttings after,	Of sorts, 3 bushels,	About 10 tons the 3 cuttings }	3 10 0	9 0 0	—	
Total, . .	10 2 10								
"STOLEN CROPS."									
Cabbages, . . .	0 1 10	August, . . .	Occasionally after 1st December, . .	—	—	6 10 0	2 10 0	—	
Turnips, ...	0 0 15	August, . . .	December, . .	—	—	5 10 0	2 5 0	—	
Total, . . .	0 1 25								

(Signed), JAMES KELLY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

11th January, 1855.

JOHN REILLY, Manager.

Killenagh Model Farm.

28. KILLENAGH ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Roscommon.

January, 1855.

Agricultural Instruction.—The number of pupils receiving agricultural instruction during the year varied from thirty-two to forty-eight, of whom eight formed the "Industrial Class," and two were "Boarders." In imparting agricultural instruction to them, no pains were spared in endeavouring to make them familiar with every thing that was practical and useful; and the erection of the new farm buildings afforded me favourable opportunities for instructing them in the knowledge of many important matters connected with improved farm economy. It is highly gratifying to me to find that many of them have made very fair proficiency in both literary and agricultural studies, and that they are daily becoming more desirous to acquire a knowledge of the principles of improved husbandry.

Model Farm.—The same system of farm management has been pursued as in previous year. The green crops were very good; and the Italian rye-grass was so very fine that it has induced many of the neighbouring farmers to try its cultivation; but the produce of the grain crops was very inferior, which has diminished the profits very much.

Live Stock.—The stock kept on the farm during the year were, two cows, nine pigs, and some poultry. The cows were constantly house-fed during the winter, but they were allowed to graze for about six hours each day in summer.

Manures.—The only manure used was the farm-yard manure produced on the farm, which was applied in the usual way.

Permanent Improvements.—The chief permanent improvements were —the enclosing of a paddock adjacent to the cow-house, the planting of thorn-hedges, some drainage, and the erection of the new farm-steading—which is by far the most important point to be noticed under this head, and the most decisive step that has yet been taken for raising this school to a high place among the educational institutions of this province. They have been erected by the patron, C. French, Esq., solely at his own expense, and consist of barn, byre, dairy, piggeries, and stable, with a loft to answer as a granary and store (just completed), to which is immediately to be added a steaming shed for preparing and cooking the food for the farm animals. The work has been executed in a very substantial and creditable style; and as a compact and systematic arrangement has been adopted in the plan and construction of them, they are not only a permanent improvement of the greatest importance to this farm, but also a useful example to the surrounding country.

Now, that these buildings are completed, and that we have been so successful in the reclamation of this farm as to have brought it from the wet and exhausted state in which it was, to the highly cultivated appearance it now presents, and that the National School promises to be one of the best in the province, I hope the Commissioners, with their usual liberality, will grant us the means of affording a more extensive course of instruction, by allowing this school to be ranked as a "Model" Agricultural School, with all the advantages allowed to similar institutions.

MICHAEL OWENS, Agricultural Teacher.

Having been called upon by the teacher of the Killenagh Agricultural National School to assist as valuator of the stock, produce, &c., on hands at the

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Killenagh Model Farm.

close of the year, and having performed that duty to the best of my ability, it is with sincere pleasure I avail myself of the opportunity thus afforded me to bear testimony to the superior manner in which this useful institution is conducted. The want of such an establishment, where the farmers of the locality might obtain useful information connected with their business, and where their sons might receive a good *practical* education, has long been felt. The ruinous system of extracting the entire substance out of the land by a succession of cereal crops, so long as they would repay the expenses of cultivation, will soon, it is to be hoped, be abandoned, and the practice of following a regular and systematic "*rotation*" of cropping will be the *rule* and not the exception. The superiority of the crops raised on this farm (which is of inferior quality) under such a system, being seen and appreciated by the neighbouring farmers, must eventually be generally adopted, and cannot fail in securing to the husbandman much more remunerative results than he could heretofore realize.

Signed, TIMOTHY MURRAY.

Killenagh, 2nd January, 1855.

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Killenagh Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	52	13	6
„ Paid for Labour,	22	16	6
„ Free Labour of Pupils,	9	4	6
„ Paid for Farm Seeds,	2	8	4
„ „ Manures,	—		
„ „ Cattle,	18	13	7
„ „ Feeding Stuffs,	4	8	1
„ „ Implements and Repairs,	1	19	6½
„ „ One year's Rent of Farm,	8	2	0
„ „ „ Poor Rate,	0	4	4
„ „ „ County Cess,	0	9	0
To Profit and Loss for balance, being gain on the year,	3	3	1½
	£124	2	6

Cr.	£	s.	d.
By amount received for Grain,	2	5	7½
„ „ Roots, &c.,	17	1	0
„ „ Cattle Sold,	19	8	6
„ „ Dairy Produce,	18	3	2½
„ „ Eggs and Poultry,	1	10	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	65	14	2
	£124	2	6

Appendix I.

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Killenagh Model Farm.

TABLE showing the CROPPING of the Killenagh Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 3 26	March and April,	From Aug. to Nov.,	8 cwt.,	5 tons,	8 0 0	6 7 9	—	White Rocks: all sound.
Turnips,	0 2 8	May and June,	December,	4 lbs.,	17 tons, 6 cwt.,	5 0 0	6 15 3	—	Swede.
Mangels,	0 0 36	May,	December,	4 lbs.,	22 tons, 3 cwt.,	5 10 0	4 19 10	—	Very good.
Cabbages,	0 0 24	From Feb. to May,	From July to Dec.,	17,640 plants,	Weight not taken,	8 10 0	1 2 6	—	
Parsnips,	0 0 29	Beginning of April,	December,	6 lbs.,	10 tons,	8 0 0	3 19 9	—	An excellent crop.
Carrots,	0 0 10	Beginning of April,	End of November,	6 lbs.,	8 tons,	8 0 0	0 15 0	—	White. About one-tenth started to seed.
GRAIN.									
Wheat,	0 1 8½	October, 1853,	September,	8 stones,	2 barrels,	5 0 0	—	0 6 6	
Rye,	0 2 6	October, 1853,	September,	8 stones,	2 barrels,	4 10 0	—	1 6 10¾	
Oats,	0 1 26	End of March,	September,	14 stones,	5 barrels,	4 0 0	—	0 7 2½	
GRASS.									
Soiling and Hay,	0 3 14	Sown with Oats in April, 1853,	May, July, Sept., 1854,	10 lbs. red clover, and 1 bushel of Rye-grass,	9 tons of the mixture, clover and Italian rye-grass; 6 tons, the part under perennial rye-grass alone,	3 10 0	2 1 10	—	This is the weight of the 3rd cutting. The other two cuttings were nearly as heavy. It was top dressed after each cutting.
Meadow,	0 3 34	—	August,	—	2 tons, 10 cwt.,	2 0 0	3 0 0	—	
Pasture,	2 0 17	Permanent,	Grazed on,	—	—	1 0 0	—	—	
Paddock,	0 1 24	Do.,	Do.,	—	—	1 0 0	—	—	
Total,	7 2 22½					Total,	29 1 11	2 0 7¼	
						Deduct,	2 0 7¼		
							27 1 4		

(Signed), MICHAEL OWENS, Teacher.

I certify that the foregoing Returns and Accounts are correct according to the best of my knowledge and belief.

January, 1855. WILLIAM HUGHES, Manager.

Geevagh Model Farm.

29. GEEVAGH ORDINARY AGRICULTURAL NATIONAL SCHOOL, Co. Sligo.

January 9, 1855.

Agricultural Instruction.—There has been a slight decrease in the attendance of the "agricultural class," as compared with the previous year. We have no boarders; neither have we, as yet, been enabled to establish an "industrial class." Considering the limited scale of operations which must necessarily prevail upon such a small farm as this, I must say that the proficiency acquired by the pupils in this important branch of industrial knowledge is most satisfactory. I am borne out in this opinion by the testimony of the Sub-Inspector of Agricultural Schools, who, in his last report, states that he was "highly pleased with their quickness and intelligence," and that "they are evidently trained to exercise their thinking faculties upon this important branch of their education."

Model Farm.—The quantity of produce raised last season off the farm considerably exceeded that of any former year since I commenced its cultivation. My crop of turnips was really excellent; the produce was equal to thirty-six tons per statute acre. This result I attribute chiefly to deep cultivation. Acting upon the suggestions of the agricultural Sub-Inspector, I have laid out and enclosed a small garden, which the pupils take much pleasure in tending, and assisting to cultivate.

Live Stock, &c.—I have one cow, one pig, and some poultry. As one instance of the advantages of house-feeding, I may here state, that I fed my cow last season *in the house*, solely with the produce of thirty-two perches of land, from the fourth of June to the fifteenth of October. Any man, whose land is suited to the cultivation of clover, and who cultivates it properly, may house-feed in a similar way, and with similar success.

Manures.—The house-feeding system enables me to have an abundance of excellent putrescent manure. I preserve it in a sheltered position, immediately adjoining the cow-house. Instead of a tank for the liquid manure, I have a sewer *in* the cow-house, into which "bog-stuff is cast once a-day; this absorbs the liquid, and becomes a valuable manure, so that nothing is wasted or lost.

I regret to say that the progress of agricultural improvement in this locality is but slight. The cultivation of flax is, however, more carefully attended to than formerly, and turnips are cultivated, though upon a limited scale, by many farmers. Nobody expects that the present generation of Irish farmers will speedily abandon the old system, to which they have been trained from early infancy; but it is equally reasonable to anticipate that the youth, who are training up in a good system, will be equally tenacious of the improved principles they have imbibed; for every one knows that early education, and practical good example, will produce good fruit, and that the youths who are now receiving a sound agricultural knowledge throughout Ireland, will become very different men from what their fathers were.

THOMAS CLARKE, Teacher.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Geevagh Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	17	1	6
" Paid for Labour,	1	17	10
" Free Labour of Pupils,	1	5	0
" Paid for Farm Seeds,	1	6	9
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	3	0	0
" " Implements and Repairs,	0	8	0
" " One year's Rent of Farm,	3	0	0
" " " Poor Rate,	0	10	0
" " " County Cess,			
To Profit and Loss for balance, being gain on the year,	3	5	5
	£31	14	6

Cr.	£	s.	d.
By amount received for Grain,	5	12	0
" " Roots, &c.,	4	10	0
" " Cattle Sold,	—		
" " Dairy Produce,	2	10	0
" " Eggs and Poultry,	0	10	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	18	12	6
	£31	14	6

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Geevagh Model Farm.

TABLE showing the CROPPING of the Geevagh Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips,	0 0 22	12th May,	November,	5 lbs.,	38 tons,	9 0 0	18 0 0	—	I venture to say this result would be obtained from the cultivation of an acre of such turnips as I raised last season.
Mangel,	0 0 8	10th May,	October,	4 lbs.,	30 tons,	9 0 0	13 0 0	—	
Potatoes,	0 0 30	11th March,	—	14 cwts.,	8 tons,	7 0 0	Not estimated.	—	
Kohl Rabi,	0 0 5	12th May,	November,	5 lbs.,	Not estimated,	—	Do.	—	
Cabbages,	0 0 5	3rd February,	November,	—	Do.,	—	Do.	—	
GRAIN.									
Oats,	0 3 10	20th March,	15th September,	16 stones,	8 sacks of 24 stones per,	3 10 0	6 10 0	—	
GRASS.									
Clover,	0 2 25	20th March,	—	20 lbs., with grass seeds.	—	—	—	—	
Garden, &c.,	0 0 15	—	—	—	—	—	—	—	
Total,	2 0 0								

(Signed), THOMAS CLARKE, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

9th January, 1855.

DOMINICK NOONE, Manager.

30. UPPER ARIGNA ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Sligo.

Upper Arigna Model Farm.

January, 1855.

Agricultural Instruction.—As it has not been my good fortune to have "boarders" in connexion with this establishment, it only remains for me to hope that an "industrial class" will, ere long, be endowed.

"*Agricultural Class.*"—This class consists of fourteen boys, who continue to give me much satisfaction by their progress and attention to business. An increase of four has taken place since my last report; but, notwithstanding the wish for agricultural knowledge, the same unwillingness still appears on the part of parents and pupils to work on the farm.

Model Farm.—The degree of success which has attended my labours on the farm for the past year may not appear satisfactory, when, by reference to the "balance sheet," will be found that there has been a loss on the year's transactions; but this loss is not to be attributed to a want of skill in farming operations, as it is by the failure of the potato that it has occurred.

Live Stock and Dairy Management.—The live stock now consists of but one cow, which is constantly house-fed; it would have been greater had not causes occurred over which I could exercise no control. As to "dairy management," the produce is consumed by the family, being also small. No experiments were made in this department.

Manure.—This is made up of the refuse of the hay and straw, mixed with dung from the cow-house, bog-mould, heath, sedge, rushes, &c.; it is carried to the headlands of the divisions intended for green crops, and there covered with bog-mould or clay, as the case may be.

Improvements.—I have effected but little in this way during the past year, beyond the levelling and fencing of a piece of land for a cottage garden, as adverted to in my last report.

Progress of Agricultural Improvement.—The progress of agriculture is rather slow in this neighbourhood. However, there are many things indicative of an advancement; such as the sowing of patches of clover, vetches, flax, and cabbages; and although I regret the sowing of turnips has been neglected for the past season, I have strong reason to believe that, for the future, they will not be so, as many have lost by not giving this plant a place, instead of part of the extent under the potato. It is gratifying to be able to state that the flax crop is becoming so general; the saving of the seed has been tried by many as well as myself; but it is a question whether it will be continued, as I fear in many instances, which have come under my notice, that it is not sound. I had some saved which I sowed last season; it did very well; but about one-fifth was unsound; in anticipation of which, I sowed thickly, and thereby had a full crop.

MICHAEL GRADY, Teacher.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Upper Arigna Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	24	19	6
" Paid for Labour,	3	17	6
" Free Labour of Pupils,		—	
" Paid for Farm Seeds,	2	17	4
" " Manures,		—	
" " Cattle,	18	16	3
" " Feeding Stuffs,		—	
" " Implements and Repairs,		—	
" " One year's Rent of Farm,	2	10	2
" " " Poor Rate,	0	4	6
" " " County Cess,		—	
To Profit and Loss for balance, being gain on the year,	0	16	6
	£54	1	9

Cr.	£	s.	d.
By amount received for Grain,	4	3	9
" " Roots, &c.,	6	0	0
" " Cattle Sold,	11	8	0
" " Dairy Produce,	7	7	0
" " Eggs and Poultry,	1	18	6
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	23	4	6
	£54	1	9

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Upper Arigna Model Farm.

TABLE showing the CROPPING of the Upper Arigna Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes, ...	1 1 0	March and April, .	October & November,	128 stones, .	4 tons, . .	6 4 6	2 4 6	—	This crop has much disappointed my expectations—was cut off before coming to maturity.
Turnips, ...	0 0 20	June, . . .	25th November, .	5 to 6 lbs., .	20 tons, . .	5 10 0	10 0 0	—	
Cabbages, ...	0 0 10	April, . . .	December, . .	10,080, . .	12 tons, . .	8 0 0	12 0 0	—	
GRAIN.									
Oats, ...	1 2 0	April, . . .	5th October, . .	12 to 14 stones,	15 cwt., . .	2 17 6	3 0 0	—	The oat crop seldom succeeds well here, owing to fogs and mists.
Flax, ...	0 0 10	3rd May, . .	20th August, . .	3 bushels, .	16 stones, .	5 12 6	5 10 0	—	The flax crop cannot be expected to do well upon such a soil as that which is in connexion with this school.
GRASS.									
Clover and grass, . .	1 0 0	April, . . .	1st week in Sept.,	4 bushels of rye grass, and 12 lbs. of clover,	Not weighed,	3 5 0	3 0 0	—	
Total, . .	4 0 0								

(Signed), MICHAEL GRADY, Teacher.

6th January, 1855.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

DOMINICK NOONE, P.P., Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Bridgetown Model Farm.

31. BRIDGETOWN ORDINARY AGRICULTURAL SCHOOL, Co. Clare.

January 12, 1855.

Agricultural Class.—This class consists at present of twenty-eight school-boys, who receive agricultural instruction for one hour each day. It gives me great pleasure to state that they manifest the greatest anxiety to obtain agricultural information, and that they cheerfully perform the light work of the farm.

Industrial Class.—I have not yet been able to organize or obtain aid towards the endowment of such a class, though the evident prospect of the scarcity of labour, and the high rate of wages, which is already manifesting itself in this locality, would render its formation extremely desirable. Should I be favoured with assistance towards it, I would gladly pay half the required amount, for I could not expect my patron to do it, as he is not the proprietor of the land.

Model Farm.—When the agricultural department was received into connexion in June, 1853, the farm contained six statute acres; but since that period the middleman, under whom I hold, deprived me of four acres, on which I had effected a considerable amount of improvement. Although the two acres still left to me are below the minimum required to entitle the agricultural department to receive aid, yet the Agricultural Sub-Inspector, Mr. Brogan, was pleased to inform me, at his last inspection, that, in consideration of the systematic and efficient manner in which it is cultivated, and the good example I am affording in my neighbourhood, he would recommend its being continued in connexion.

Cultivation.—The "three-course rotation" is regularly followed, and the following are some observations on the cropping:—

The division under potatoes, which had yielded four cuttings of clover and rye-grass the previous year, was, towards the close of the year, dug level, and subsequently harrowed, and drilled twenty-six inches wide, early in March. The cuttings were laid over the dung fourteen inches apart, and then covered with spade. The crop grew so luxuriantly as to be admired by every passer-by, until about the tenth of September, when the blight set in and made dreadful havoc. When the land is dry, I consider the drills return a surer and better crop of potatoes than the lazy beds, and the land can also be kept cleaner, and better pulverized.

Mangels.—These were sown in May, the land prepared the same way as for the potatoes, and the same distance between the drills; the seed was dibbled in at six inches apart, first thinned to one in each dibble hole, and secondly, every alternate plant taken off and consumed by the stock, which left them to stand twelve inches asunder. They were a fair crop. I recommended my landlord to transplant the first thinnings into a piece of land in which he had previously sown turnips, which were destroyed by the birds when the plants appeared above ground. The produce was very large, and he was very grateful to me for the advice.

Turnips.—These were sown in June, and the after-culture the same as the mangels; but in every alternate hole I dropped cabbage seed, and when the plants were drawn to be transplanted, the turnips stood at the regular distance asunder, and were in no way affected by the growth of the cabbage plants. I mean to do the same every year.

Live Stock.—I house-fed three cows from the twentieth of May to the twenty-fifth of September, with plenty of green feeding, obtained from the soiling division (2R. 15P.), and with cabbages. The cutting of the former was not commenced as early this season as the last, on account of the great drought that prevailed during the months of April and May; still it grew three good crops, being manured after each cutting.

Manure.—This is collected in a pit four feet deep. There is not yet any tank, the yard being newly made; but the liquid part is absorbed by peat-mould, put under the cattle every second day. The heap is afterwards carefully covered with mould to prevent loss.

Progress of Agriculture.—The indolent farmers of the old school think it absurd to follow the example of a schoolmaster in his mode of agriculture. I am happy, however, to find that after two years' observation and experience of my system, and its successful results, there are some who are beginning to reject and condemn their old system, and adopt the new and improved one.

JAMES M'GRATH, Agricultural Teacher.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Bridgetown Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	58	5	9
,, Paid for Labour,	4	4	3
,, Free Labour of Pupils,	0	5	0
,, Paid for Farm Seeds,	0	10	10½
,, ,, Manures,	0	18	0
,, ,, Cattle,	10	12	9
,, ,, Feeding Stuffs,	20	0	7
,, ,, Implements and Repairs,	1	2	4½
,, ,, One year's Rent of Farm,	5	10	0
,, ,, ,, Poor Rate,		—	
,, ,, ,, County Cess,		—	
To Profit and Loss for balance, being gain on the year,	14	9	8½
	£115	19	3½

Cr.

	£	s.	d.
By amount received for Grain,	2	0	0
,, ,, Roots, &c.,	5	10	0
,, ,, Cattle Sold,	29	1	9
,, ,, Dairy Produce,	20	7	1½
,, ,, Eggs and Poultry,	0	19	5
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	58	1	0
	£115	19	3½

Bridgetown Model Farm.

TABLE showing the CROPPING of the Bridgetown Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 1 0	March,	October,	70 stones,	8 tons,	13 0 0	11 10 0	—	Fine crop, none damaged until half used.
Turnips,	0 0 20	June,	November,	4½ lbs.,	16 tons, 10 cwt.,	9 5 0	3 18 6	—	Fair crop.
Mangels,	0 0 25	May,	November,	5½ lbs.,	18 tons, 5 cwt.,	9 10 0	6 15 0	—	Ditto.
Cabbages,	0 0 15	March and April,	When wanted,	Not taken,	—	9 0 0	4 3 6	—	
Carrots,	0 0 5	April,	November,	6 lbs.,	Not taken,	9 10 6	6 8 4	—	
Parsnips,	0 0 5	March,	November,	6 lbs.,	Not taken,	9 10 6	6 10 6	—	
GRAIN.									
Barley,	0 2 15	April,	August,	9 stones,	300 stones,	4 10 0	8 12 6	—	
GRASS.									
Clover and Rye-grass,	0 2 15	April,	Soiled,	12½ lbs.,	22 tons, 10 cwt.,	4 5 0	7 4 8	—	Three heavy cuttings.
Meadow,	0 0 20	April,	Soiled,	12½ lbs.,	4 tons, 10 cwt.,	—	—	—	Scarcely worth the rent, being coarse.
Total,	2 0 0								
"STOLEN CROPS."									
Cabbages,	0 1 0	September,	When wanted,	2 by 1½,	Not taken,	4 5 0	7 6 0	—	
Rape,	0 0 5	September,	When wanted,	2 by 1½,	Not taken,	4 5 0	6 4 8	—	
Kohl rabi,	0 0 5	September,	When wanted,	2 by 1½,	Not taken,	4 5 0	6 3 4	—	
Mangels,	0 0 10	September,	November,	1½ by 1½,	Not taken,	3 15 0	5 2 6	—	
Total,	2 1 20								

(Signed) JAMES M'GRATH, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

9th January, 1855. NICHOLAS POWER, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballygloss Model Farm.

32. BALLYGLOSS ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Kilkenny.

January, 1855.

Agricultural Instruction.—The agricultural class consists of twelve of the more advanced pupils, four of whom form an industrial class. I am much pleased with the attention of the members of each class to their studies, and I consider they have made a tolerable proficiency for the time of their attendance.

Model Farm.—Although my labours on the farm have been fairly successful, the profits would have been much more considerable, were it not for the partial failure of the potato crop by blight, and also that of my turnip crop from drought, which set in after the sowing of the seed.

Live Stock.—The only stock on the farm at present is a cow; and, as I have not as yet been furnished with suitable farm offices, it has not been in my power to exhibit a proper system of management; but, as suitable offices are now in progress of being erected, I hope I shall be able, ere long, to carry on the operations of my farm in conformity with the principles of an improved system of husbandry.

Manure.—By constantly house-feeding my cow a valuable supply of manure is produced, which is deposited in a proper receptacle, and covered with alternate layers of absorbent earth, to prevent a too rapid decomposition, and also to absorb the gases generated by decomposition. The mode of application differs nothing from that generally practised.

The Permanent Improvement effected during the year consisted in the removal of a large quantity of stones, which lay between the surface and subsoil, in the portion of land under green cropping. This operation was equivalent to subsoiling.

Progress of Agricultural Improvement.—Agricultural improvement has recently been rapidly progressing in this locality. Successional grain cropping is now entirely unknown. The system of "alternate husbandry," and the summer soiling of cattle, very generally prevail, so that the beneficial results of a sound and scientific system of husbandry is everywhere apparent, both in the increased fertility of the soil, and in the improved condition of the cultivation.

MICHAEL COURTENAY, Teacher.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballygloss Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	13	3	0
" Paid for Labour,	4	5	5
" Free Labour of Pupils,	1	10	0
" Paid for Farm Seeds,	1	19	0
" " Manures,	1	4	4
" " Cattle,	7	5	0
" " Feeding Stuffs,	—		
" " Implements and Repairs,	—		
" " One year's Rent of Farm,	2	10	0
" " " Poor Rate,	—		
" " " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	6	12	3
	£38	9	0

Cr.

	£	s.	d.
By amount received for Grain,	7	10	0
" " Roots, &c.,	—		
" " Cattle Sold,	8	3	0
" " Dairy Produce,	4	8	0
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	18	8	0
	£38	9	0

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballygloss Model Farm.

TABLE showing the CROPPING of the Ballygloss Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips, ...	0 2 0	27th May, . .	December, . .	4 lbs., . .	4 tons, . .	6 0 0	—	2 0 0	
Cabbages, ...	0 0 12	March, . . .	From July to Dec.	—	—	—	—	—	
Potatoes, ...	0 1 12	March, . . .	From Aug. to Nov.,	80 stones, .	20 barrels,	8 0 0	—	1 6 8	
Parsnips, ...	0 0 9	March, . . .	November, . .	8 lbs., . .	10 tons, .	7 10 0	—	—	
Carrots, ...	0 0 3	April, . . .	November, . .	8 lbs., . .	10 tons, .				
GRAIN.									
Oats, ...	1 3 33	1st week of April, .	14th September, .	15 stones, .	8 barrels, .	2 14 9	3 5 3	—	
GRASS.									
Grass, ...	0 3 36	April, . . .	July, ...	Rye-grass 2 bush. Red clover 6 lbs.,	2 tons, . .	3 0 0	3 0 0	—	
Total, . .									
"STOLEN CROPS."									
Total, . .									

(Signed), MICHAEL COURTENAY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief; but the School only recently having been brought into full operation, the teacher has not been supplied with the necessary books for keeping the accounts, and did not obtain a valuation at the commencement of the year.

5th January, 1855.

JOHN BLACKET, Manager.

33. CLOGHAN ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Donegal.

Clogham Model Farm.

January 12, 1855.

Agricultural Instruction.—The number of boys in the Agricultural Class varies from ten to twenty, according to the season. As most of them are farmers' sons they have, in the spring and summer months, and when the weather is fine, so much labour to perform, that they rarely attend school, save in the winter months, for which reason I am greatly hindered from teaching the practice of agriculture on the farm, and am also deprived of a quantity of valuable labour which they could easily afford at that season. In the winter months, when the agricultural class is largest, I have seldom an opportunity of taking the boys to the farm, at the appointed hour, for the purpose of teaching them the practice of what they have been learning in the school-room; but when the weather permits they are instructed on the farm for half an hour daily.

The extent of the farm is ten statute acres, four of which are arable, on which I intend to carry out a four-course rotation; the other six are unreclaimed bog and mountain, but are intended shortly to be brought under the process of reclamation. I did not come into possession of the farm until March, 1854; the want of manure then prevented me from putting down a sufficient quantity of green crops. However, I succeeded in planting about half an acre of potatoes, in ridges of four feet in breadth, which produced a pretty fair return. The remaining three and a-half acres I got ploughed in the first week of April, and sown with oats shortly after, which gave a fair return, the land having been a length of time in pasture. The manure applied to the potatoes was the scourings of a ditch mixed with a small quantity of farm-yard manure. I conveyed the scourings of the ditch to the field, where it was made into a heap, and mixed with lime which had been slaked with water in which a considerable quantity of salt had been dissolved. The lime, even during the short period which the heap remained untouched, had a most beneficial effect in decomposing the vegetable matter contained in it. The compost was applied to the potatoes first, and then the farm-yard manure.

The present stock on the farm consists of one cow and a heifer; and as there is no tank the liquid manure is absorbed by dried peat-mould. From the knowledge which the children have obtained at school of the value of liquid manure, and also from the occular demonstration they have had of its beneficial effects on some cabbages of a superior quality which were grown in a garden in front of the school, by the aid of liquid manure alone, I am happy to find that most of them are very careful in preventing it from running to waste as heretofore.

As the agricultural department was not received into connexion till late in the year, and as my operations on the farm were very limited, and beset with the usual difficulties, I cannot furnish any "balance sheet" for last year; but I anticipate being able to give a more satisfactory report, and also to be able to furnish a regular account for the next year.

THOMAS M'CREERY, Teacher.

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34. CONVOY ORDINARY AGRICULTURAL SCHOOL, County Donegal.

Convoy Model Farm.

Agricultural Instruction.—The number of agricultural pupils at the date of the formation of the class, in April last, was six; but it has since increased to ten. They take a lively interest in the study, and manifest a disposition to profit by my instructions.

In this district, for the last ten years, agriculture has been much improved by the example of Mr. D. Craig, who is steward to R. G. Montgomery, Esq., of Convoy.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Convoy Model Farm.

Model Farm.—In order that you may understand my position at the outset, and be better enabled to judge of my future progress, I beg to submit the following particulars before you. In 1828 I began to teach in Convoy, under the "Society for Promoting the Education of the Poor of Ireland;" and for reasons better known to the Committee of the Convoy School than to me, it was not placed under the Commissioners of National Education till 1848. In the years 1837 and 1839 I bought the tenant's interest in two small sections of the Town Parks of Convoy, which was then in the most neglected state possible, and from these my present model farm is composed. I set to work to improve this by draining, filling up irregular old flax-ponds, levelling old crooked mearings and internal fences, &c., and thus bringing the farm into four regular divisions, on which I established a "four-course rotation" of cropping. I was the first tenant who introduced the growth of turnips on the Convoy estate, and am yet the only cultivator of mangel. In the year 1843, on one of the first sections of the farm, I brought forward a beautiful crop of Aberdeen turnips, manured with superphosphate, for which crop I proposed entering the Stranorlar Agricultural Society for competition; but I was informed that I was not privileged to compete because I did not live by farming alone. In 1844 I was better informed, and connected myself with that society, from which I received a first class premium, and also a first premium for the best drained field of its extent in the Stranorlar union. In 1845 I was equally successful in competing for turnips; but two acres of potatoes, which were of the finest quality, were destroyed by the disease. In 1846 my two acres of potatoes were a total failure. In 1847 and 1848, with redoubled exertions, I brought forward, each year, on the fourth of the farm, one of the best crops of turnips, carrots, parsnips, and mangels in the union. But my resources were again crippled, and my progress retarded by casualties and failures. In 1847 I lost a valuable cow by murrain. In 1849 my flax crop did not exceed one-third of an average; and in 1850 the return from that crop was £12 less than usual. In the same year pleura-pneumonia carried off all my cattle, except one calf, six months old, and, therefore, my stock has been small since 1850. In April last, I had two in-calf cows and a yearling heifer, but one of the two, value for £10 10*s*., died; and this, with another failure of flax, has made the balance sheet for this year £20 short of what I expected. After ploughing down that part on which the flax-seed failed, I applied five cwt. of Peruvian guano, and sowed Aberdeen turnips thereon on the 4th of July, which will account for so large a breadth of that root being grown on the farm this year. In the two years past I had a diseased crop of Swedish turnips each year, the failure of which deterred me from sowing any this year. The labour account may be thought large, but the ploughing twice for flax, and three times for potatoes and turnips, besides drilling and ploughing for oats and wheat once, was very expensive. The sums received for roots and dairy produce is the amount charged as consumed by my family.

The Commissioners of National Education have before them the reports of their Inspectors, R. Robinson and M. Brogan, Esqrs., respecting the Convoy School and Model Farm, and from these, with the statement now furnished, it will appear that I had to contend with no ordinary difficulties; and that I have not been wanting either in my exertions to overcome them, or in my endeavours to set an example of good husbandry to my neighbours.

THOMAS LIVINGSTON, Agricultural Teacher.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Convoy Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	42	2	2
" Paid for Labour,	21	9	1
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	5	13	1
" " Manures,	3	0	0
" " Cattle,	10	2	6
" " Feeding Stuffs,	—		
" " Implements and Repairs,	0	6	6
" " One year's Rent of Farm,	12	0	0
" " " Poor Rate,	0	14	0
" " " County Cess,	0	6	9½
To Profit and Loss for balance, being gain on the year,	7	8	8
	£103	2	9½

Cr.

	£	s.	d.
By amount received for Grain,	22	9	10½
" " Roots, &c.,	11	0	5
" " Cattle Sold,	6	11	0
" " Dairy Produce,	8	5	0
" " Eggs and Poultry,	0	16	6
By Inventory and Valuation taken at close of year,	54	0	0
	£103	2	9½

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Convoy Model Farm.

TABLE showing the CROPPING of the Convoy Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes,	0 3 24	8th April,	October,	12 cwt.,	5 tons,	8 7 6	9 2 6	—	
Aberdeens,	1 3 31	June and July,	November,	5 lbs.,	15 tons,	7 10 0	3 15 0	—	
Mangels,	0 1 0	12th May,	November,	4 lbs.,	18 tons,	8 10 0	9 10 0	—	
GRAIN.									
Flax,	2 1 0	1st May,	15th and 16th August,	3½ bushels,	2 cwt.,	5 11 0	—	0 11 0	
Wheat,	0 2 23	October,	September,	15 stones,	1 ton,	4 2 6	10 7 6	—	
Oats,	1 0 20	1st week April,	September,	15 stones,	15 cwt.,	3 17 6	2 12 6	—	
GRASS.									
Grass (hay),	0 0 25	Sown with oats,	Used for soiling,	2½ bushels and 10 lbs. clover,	Not ascertained,	2 4	5 16 0	—	
Grass (soiling),	2 3 0	—	—	—	—	—	—	—	
Total,	10 0 3								

(Signed), THOMAS LIVINGSTON, Teacher.

I certify that the foregoing Returns and Accounts are correct according to the best of my knowledge and belief.

1st January, 1855.

JOHN WRAY, Manager.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Clonkeenkeryl Model Farm.

35. CLONKEENKERYL ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Galway.

January 13, 1855.

Agricultural Instruction.—The Agricultural Class consists of sixteen advanced boys, who receive half an hour's instruction in agriculture daily. The Board, on the Inspector's recommendation, having lately consented to pay four of an "Industrial Class," on the condition that four shall be paid locally, I beg to state, at present, only five are willing to enter this class on the usual conditions; but I do not hesitate to say that in a short time I shall be able to make up the full number. The five in the class at present do the light work of the farm most cheerfully for two hours daily.

The model farm, which contains 25A. 2R. 13P., (25A. 0R. 10P. of which are under tillage, and the remaining portion is occupied by offices, farm-yard, &c.,) is divided into six divisions, upon which it was originally intended to follow a six-course shift; but in consequence of one-half of the farm consisting of deep bog and moor it was deemed advisable to lay down two divisions to permanent pasture and meadow, and follow a four-course rotation on the four remaining divisions.

The crops cultivated last year were potatoes, turnips, mangels, oats, flax, rape, and grass; and it is gratifying to me to have to state that my exertions have been successful, as will be seen by reference to the statistics of the farm. I have, for the last two years, cultivated potatoes on deep bog with farm-yard manure, and this plan has proved very successful—particularly last year; for, out of 2,800 stones, I had only twenty stones (or less than one per cent.) diseased. The quality being, generally, superior to any in this neighbourhood, particularly for seed, I have sold a large portion of them at a remunerative price. I have to remark, that on a small portion of the field to which gravel was applied in 1853, the quantity diseased was much greater than on the remainder of the field. This is a remarkable fact, and deserving of notice. There can be no doubt that there is some property in the peat which neutralizes the effects of the blight. The other crops were of a fair average quality, with the exception of one field sown with oats, the greater part of which consists of moory soil. The crop looked well when coming up, but the dry season setting in and continuing, a portion withered, and the remainder was of inferior quality.

Hitherto I was prevented from following a regular system of house-feeding, owing to the farm buildings not being fitted up; but I expect shortly to have them completed, when I will be able to carry out the system effectually.

The manure is removed from the stable, cow-houses, and pig-sty, during the week, made up every Saturday, and covered with peat mould, which absorbs the liquid and volatile gases. The only special manure used for the past year was two cwt. of guano, which was applied with farm-yard manure in the cultivation of the turnips, and proved beneficial in promoting the growth of the plant in its early stages.

The permanent improvements effected during the past year consisted in fencing and closing open drains.

Progress of Agricultural Improvement in this district.—Agriculture is still in a very backward state amongst the small farmers in this neighbourhood. The turnip, so valuable in other localities, is cultivated merely as a preparation of the soil for a corn crop the ensuing

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Clonkeenkeryl Model Farm.

year. The general system is sowing broadcast; and when drills are used they are generally too close, and the plants left within three or four inches of each other. Hoeing is seldom practised, and weeds are generally allowed to overgrow the crop. This was particularly the case last year; the turnip was neglected, and all attention given to the potato, which was extensively cultivated, but not sown in time, and the blight setting in early, the late sowing has not paid the expense of seed.

The operations on this farm are anxiously observed by the small farmers of the neighbourhood. That portion of it which has been under potatoes and meadow last year, consisting mostly of deep bog, and which has paid best, has been known to them for years as growing nothing but heath and rushes, and affording a scanty pasturage to cattle during the summer months.

In conclusion, I beg to express my gratitude to my patron, Myles W. O'Reilly, Esq., for the interest he takes in this school and farm, and for his unabated kindness to me.

DANIEL FOGARTY, Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Clonkeenkeryl Model Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	127	17	0
” Paid for Labour,	41	8	11
” Free Labour of Pupils,	0	12	0
” Paid for Farm Seeds,	6	19	4½
” ” Manures,	1	17	3
” ” Cattle,	35	6	9
” ” Feeding Stuffs,	—		
” ” Implements and Repairs,	2	19	1
” ” One year's Rent of Farm,	20	0	0
” ” ” Poor Rate,	—		
” ” ” County Cess,	0	16	10
To Profit and Loss for balance, being gain on the year,	160	12	8½
	£398	9	11

Cr.

	£	s.	d.
By amount received for Grain,	32	18	6
” ” Roots, &c., sold and used,	63	1	10
” ” Cattle Sold,	52	2	0
” ” Dairy Produce sold and used,	17	6	4
” ” Eggs and Poultry sold and used,	5	5	3
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	227	16	0
	£398	9	11

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Clonkeenkeryl Model Farm.

TABLE showing the CROPPING of the Clonkeenkeryl Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Turnips,	3 0 0	May and June,	December,	5 lbs.,	18 tons,	4 0 0	6 10 0	—	Tops not estimated—all used by cattle.
Mangels,	0 1 0	1st May,	November,	4 lbs.,	17 tons,	4 10 0	9 13 0	—	Tops all used by cattle—not estimated.
Potatoes,	3 2 3⅓	March, April, & May,	October and Nov.,	12 cwts.,	5 tons,	6 0 0	14 0 0	—	Potatoes sown in deep bog, only 20 stones damaged of the entire crop.
Flax,	0 1 13⅓	May,	September,	2 bushels,	—	—	—	—	This crop was bad, and will about pay the expense of cultivation.
GRAIN.									
Oats, Field No. 3,	4 2 2½	End of March,	September,	12 stones,	8 barrels,	2 3 0	—	0 1 0	The oats on field No. 3 was very bad; the greater part of the field being moory, and the early season being dry, it withered early, although it looked promising at first.
Oats, Field No. 4,	6 1 4⅓	April,	September,	12 stones,	8 barrels,	2 10 0	2 4 0	—	
GRASS.									
Pasture,	3 3 7½	—	—	—	—	0 11 0	0 19 0	—	
Hay,	3 1 19⅓	—	August,	—	2 tons, 8 cwts.,	1 2 0	2 10 0	—	A heavy crop on deep bog; top-dressed with marl.
Total,	25 0 10⅓								
"STOLEN CROPS."									
Rape,	0 1 18⅓	September,	Fed off by sheep,	12 lbs.,	Not estimated,	Not estimated.	—	—	This crop would merely pay the expense of cultivation.

(Signed), DANIEL FOGARTY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

17th January, 1855.

MYLES W. O'REILLY, Manager.

36. LAHERDANE ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Mayo.

Laherdane Model Farm.

January 2, 1855.

Agricultural Instruction.—The "Agricultural Class" consists of twenty boys, varying from eleven to seventeen years of age. The time set apart for instruction in this department is, in the school, from three till half-past three o'clock on each day of the week, and, when the weather permits, on the model farm, from one till half-past one o'clock, being the time heretofore allowed for recreation. The text-book is the "Agricultural Class Book" published by the Board. They have not as yet advanced far in agricultural knowledge, as it was only in September last the agricultural free stock granted by the Board reached the school.

Model Farm.—The extent of the farm is about sixteen statute acres, divided into two parts by the public road, which passes through it from north to south. The portion of the land lying to the east of the public road contains 4A. 1R. 5P., (including 2R. 7½P., occupied by house and garden,) which I have divided into four equal parts (exclusive of the garden) to be cultivated as a model farm during the gradual reclamation and improvement of the portion west of the road, this plan having been suggested by the Sub-Agricultural Inspector. The land was quite exhausted when it came into my possession, owing to the imperfect system generally practised in this locality, namely, cultivating successive grain crops.

The rotation adopted is the four-course shift, viz.:—first year, green-crops, manured; second year, grain, with seeds; third year, grass, cut for hay and soiling; fourth year, grain, alone.

I have to remark that about sixty-four perches of poor, wet, unreclaimed land extends along the eastern boundary of the farm, the greater part of which is a quagmire. This portion I intended to have thorough-drained and subsoiled last autumn, but for want of sufficient capital to employ more labourers, I was unable to attend to it; but I trust I will be able to meet the expenses that may attend it this year.

Permanent Improvements.—With regard to the portion of land occupied by the garden, the expenses which attend the improvement of it were enormous, as I had to get every foot of it dug to the depth of nearly three feet in order to get up the stones, it being all a quarry of limestone when I got possession of it. It was never tilled or reclaimed before. The average depth of stones when turned up was, at least, eighteen inches all over the garden. The largest of these I removed off the land. Then I divided the garden (which was square) into four equal parts by two walks, which cut each other at right angles, and into these I removed all the small stones, and covered them over with gravel, which has enabled me not only to put the garden in an efficient way of working, but has added considerably to its appearance. At present the garden is brought to such a state of fertility, that I hope it will soon refund the cost of its reclamation. The people of this locality now acknowledge that land of the worst description can be brought into working order if properly managed, as they declare that they once thought that they would never see this piece of land brought into its present good condition. In another portion of the model farm I have turned up a great quantity of rocks and stones, but, from the pressure of business, had not time to remove them as yet. Early in autumn, after the grain was removed, I dug about 1R. 24P. statute measure, of stubble land, which I intended for a stolen crop of winter vetches, but being disappointed in procuring seed, I had to let the land stand over for spring vetches.

Live Stock.—The stock on the farm, at present, consists of two cows, *Laherdane Model Farm.*

one heifer, one calf, and two sheep. They graze on the portion of the farm west of the road, not yet having any suitable farm offices for house-feeding, but the defect will be remedied as soon as possible.

In conclusion I beg leave to return my sincere thanks to the manager (Rev. Patrick MacHale, P.P.), for his kind co-operation, as he never loses on opportunity of impressing on his parishioners the obligations they are under of properly educating their children, and the benefits which a sound agricultural education is calculated to confer on the rising generation.

THOMAS KELLY, Teacher.

Lismore Model Farm.

37. LISMORE ORDINARY AGRICULTURAL NATIONAL SCHOOL, County Waterford.

10th January, 1855.

Agricultural Instruction.—*Agricultural Class.*—This class consists of twenty-four boys, taken from the third and fourth classes, who receive instructions on agriculture for half an hour each day. This instruction is imparted to them from "Murphy's Agricultural Instructor," and "Johnston's Agricultural Chemistry." The boys generally pay strict attention to and make satisfactory progress in their studies.

Industrial Class.—This consists of eight of the strongest boys selected from the agricultural class, four being paid by the Commissioners, and four by the patron, the Duke of Devonshire. They work on the farm for two hours each day, (three hours on Saturday), and they give entire satisfaction by the cheerfulness and alacrity with which they perform the duties imposed on them.

Model Farm.—This contains about 4A. 2R. 32P. statute measure, one acre of which is under vegetable garden, school-house, out-offices, and play ground, and the remainder divided into five equal parts is worked on the five-course rotation. The crops cultivated this year were as follows :—

	A.	R.	P.
GREEN FALLOW CROPS.			
Potatoes in drills, ...	0	1	4
Mangles, ...	0	0	37
Turnips, ...	0	0	30
GRAIN CROPS.			
Oats, ...	1	0	12
Barley, ...	0	2	33
GRASS.			
Clover and Grass for soiling, .	1	0	36

The crops were all of fair average quality and produce.

Live Stock and Dairy Management.—There are no live stock, strictly speaking, attached to the farm; but all the green crops grown on it and on other ground farmed by my brother, are consumed on the school premises, on which the offices for both farms are erected.

Manures.—A good portion of night-soil, collected on the premises, is mixed with peat-mould and clay, and is found to produce very good crops, and this with refuse from the vegetable garden, road-scrapings, and other sources, affords considerable help towards the proper manuring of that portion of the model farm intended for green crops. No extraneous manures were required.

Progress of Agricultural Improvement.—A very flourishing and useful institution called the Lismore Agricultural Society (composed exclusively of tenants of the Duke of Devonshire), exists in this locality, the beneficial results of which are easily to be discerned in the superior cultivation of this district. Various drilled green crops, viz :—potatoes, mangels, turnips, and carrots abound every where in the neighbourhood. The beneficial example, therefore, to be afforded to the district by any

Lismore Model Farm.

operations on so small a lot as the Lismore National Agricultural School can be of very little advantage to the public at large, though the system carried out on the farm itself must necessarily be of considerable benefit to the boys employed on it, and be the means of making them industrious and intelligent members of society.

Concluding Observations, &c.—The patron of this school, F. E. Currey, Esq., the active and zealous agent of the Duke of Devonshire is ever desirous of promoting the spread of industrial knowledge; and to his exertions are mainly to be attributed all that can tend to advance the social welfare of the people in this quarter. To him am I indebted for affording material assistance in forwarding the progress of our agricultural department, as he not only awarded a grant towards the payment of the industrial class, but supplied all implements necessary on the farm; for all of which I beg to tender him my most grateful thanks.

HENRY WALL, Teacher.

38. MULLINGAR ORDINARY AGRICULTURAL SCHOOL.

Mullingar Model Farm.

Agricultural Instruction.—Agricultural Class has considerably increased since the date of my last report. None of our school books are read here with more interest than those which treat of agricultural subjects. I have observed, too, that when examined upon a lesson which has just been read, the pupils display more intelligence than they usually do when examined on a lesson on any other subject. Indeed I think that the theory of agriculture could be made the most interesting subject read in our schools. A collection of objects to exemplify the substances introduced into the lessons, and a simple means of testing the component parts of the different soils, would be the only additions necessary to our present machinery. I throw out the hint for the consideration of the higher officers in the agricultural department, and it is for them to say whether it is worth improving on or not.

Farm.—There has been nothing peculiar in the management of the past year, though there is in the result. I allude to the small yield of corn which appears in the return. I find from practical experience that peaty soils, with a deep, cold, marl subsoil, heads badly, and in some instances, not at all. This is a fact which should be noted by persons experimenting on such soils.

Stock and Dairy.—My dairy management for the past year was very simple. The milk, which was small in quantity, was disposed of new. I have observed that my cows, from the time they began to use the mangel and turnip tops, fell away considerably in flesh.

Manure.—This is collected in an appropriate place near the cowhouse. Care is taken to have it always covered with peat or clay to prevent the escape of the gases when fermenting. No portable manures have been yet tried. The liquid manure, when not absorbed by peatmould, is caught and preserved in herring casks, and applied according to circumstances.

Permanent Improvements.—A fence was levelled, by which a considerable addition has been made to the part already available for cropping. I have observed no material change in the system of agriculture in this locality. My little farm is in a backward situation, and could therefore have little influence. The old system is still fondly clung to, and time, as well as palpably beneficial results, will be necessary to effect a progressive change—the chief agents in effecting which will be the pupils who are now being trained up and instructed in a proper system in the agricultural schools.

P. J. CRIBBEN, Teacher.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Mullingar Model Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory, and Valuation at commencement of year,	—		
„ Paid for Labour,	26	5	0
„ Free Labour of Pupils,	—		
„ Paid for Farm Seeds,	9	0	0
„ „ Manures,	1	0	0
„ „ Cattle,	—		
„ „ Feeding Stuffs,	—		
„ „ Implements and Repairs,	—		
„ „ One year's Rent of Farm,	11	0	0
„ „ „ Poor Rate,	0	18	0
„ „ „ County Cess,	0	12	0
To Profit and Loss for balance, being gain on the year,	11	15	0
	£60	10	0

Cr.	£	s.	d.
By amount received for Grain and Straw,	21	0	0
„ „ Roots, &c.,	25	0	0
„ „ Cattle Sold,	—		
„ „ Dairy Produce,	14	10	0
„ „ Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	—		
	£60	10	0

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Mullingar Model Farm.

TABLE showing the CROPPING of the Mullingar Ordinary Agricultural National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation. Profit.	Result of Cultivation. Loss.	Observations.
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	2 0 0	March and April,	Last week in October,	100 stones,	4 tons,	5 10 0	4 10 0	—	The manure not valued, being made on the farm.
Mangels,	0 0 32	May,	November,	3 lbs.,	14 tons,	4 10 0	9 10 0	—	Manure not taken into account.
Cabbages,	0 0 32	April,	From July,	—	—	—	—	—	Used in the house.
Vetches,	0 3 9	October,	From 15th May,	12 stones, and 3 oats,	Not ascertained,	3 0 0	—	—	
GRAIN.									
Oats,	3 2 16	October and March,	August,	16 stones,	8 barrels,	3 0 0	2 0 0	—	Peaty soil, with marl subsoil; heads only partially.
GRASS.									
Perennial, Timothy, red and white clover,	5 0 6	—	—	—	—	—	—	—	The last sowing, which took place in May, did not succeed.
Total,	11 15 0								
"STOLEN CROPS."									
Turnips,	0 2 0	7th July,	December,	3 lbs.,	Not ascertained,	2 10 0	—	—	Turned out a very light crop, principally from not being attended to in time.
Cabbages,	0 1 0	20th July,	December,	—	—	—	—	—	Given to the cattle.
Rape,	0 0 20	4th September,	—	—	—	—	—	—	Not used yet; intended to come in for April.
Total,	0 3 20								

(Signed), PETER J. CRIBBEN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

March 13th, 1855.

JOHN NICOLLS, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Loughglynn School-garden.

39. LOUGHGLYNN NATIONAL SCHOOL GARDEN, County Roscommon.

During the past year (1854) a steady advance has been made both in the training of the boys and the course of cropping pursued by them on their several allotments; but I am sorry I have to state, that in consequence of the great drought that set in last May, a great portion of the crops failed, which tended in a great measure to prevent the boys realizing the large pecuniary profits that were anticipated; yet, as soon as they found the crops had failed, they lost no time in re-cropping their plots with turnips, cabbages, and other garden vegetables, which succeeded pretty well, so that their disappointment was not so great as they at first expected.

The seeds were supplied at half-price by Mrs. Strickland, who has also been so kind as to visit the gardens frequently. I need scarcely say that her visits tended greatly to promote the neatness in which the different gardens were kept, as the fact of seeing their labours thus noticed created a spirit of emulation among the boys, who vied with each other as to who would have his garden in the best order.

The new school-house which was in course of erection last year is expected to be soon completed, when it is intended to attach a portion of land to it, to be cultivated as a "Model Garden," on which the children attending the schools can be instructed, so as to enable them to manage their gardens at home, with still greater success than heretofore. It will be much more advantageously situated than the present, and its influence as a model will have much better scope, as it will be more accessible to public inspection. Seeds will be again supplied this year at half-price, and the usual flower and root shows will be held, and premiums distributed by Mrs. Strickland; which will, as heretofore, tend to promote the greatest emulation amongst the children.

The Agricultural Class is composed of the third and fourth class boys, who are instructed on alternate days between the hours of twelve and one o'clock (this being the hour set apart for recreation). The number varies from four or five to twenty boys, but the Commissioners of National Education have not yet granted a stock of agricultural class books, the want of which is a serious drawback in their progress. The subjects treated on are drainage, and its good effects; collecting and preserving manures; green cropping; house-feeding; the laying out and general management of farms; rotation of crops, &c. The majority of the class seem to have a pretty good idea of these subjects, as they have constant opportunities of seeing drainage works carried out by Mr. Strickland, under the judicious management of his steward, and are thus afforded ample opportunities of making themselves practically acquainted with them. A portion of the lake, which was cut off by a dyke convenient to the school, having been thorough-drained this winter, I availed myself of the opportunity it afforded by taking the boys occasionally to examine the work, when I remarked to them every particular relative to their plan and effects, which I considered useful for them to know. It was most amusing to observe the diversities of opinion among themselves relative to the different modes of laying out, excavating, and filling the drains, which shows that they were not mere passive spectators of what was going forward, but that their reasoning powers were brought into exercise, and a spirit of inquiry and reflection awakened.

Agricultural Improvement is greatly on the increase in this district, the farmers of which cultivate their land, and manage their grain and green crops, the latter especially, more skilfully and successfully than the farmers of the adjacent districts. I have great pleasure in stating

Loughglynn School-garden.

that when the proprietor, Viscount Dillon, visited here last summer he was much pleased at the evidences of improvement that he witnessed; and in responding to an address presented by the tenantry, his lordship congratulated them on having their farms and crops far in advance of the other districts which his lordship had visited.

THOMAS FALLON, Teacher.

No. 4. REPORTS ON WORKHOUSE AGRICULTURAL SCHOOLS.

1. BELFAST UNION WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Antrim.

Belfast Union Workhouse Farm.

January, 1855.

Agricultural Instruction.—In this department we are working steadily; but the literary qualifications of the class continue so low, that little can be effected in the class-room. To their practical instruction, then, we must look for success; and, though much may have been effected in that department, yet an extension of our space would ensure greater efficiency, as the limited portion allotted us is not calculated to excite sufficient exertion. There are thirty-five boys receiving agricultural instruction, and who are all taken from the "sequel" class of the school, as there are none advanced above that stage at present. To those acquainted with the instruction of youth, this shows the small amount of scientific knowledge that may be expected from such a class, and how arduous and difficult it must be for a teacher to inculcate even a moderate amount of scientific instruction on boys of their capacities.

Model Farm, Manures, &c.—There is little change in the management of the farm, or in the application and preservation of manure, since last report. There has been a "four-course rotation" established on the principal portion of the ground. The crops cultivated for the past year were, cabbages of sorts, turnips, carrots, parsnips, onions, leeks, parsley, celery, &c., which were generally good; carrots were rather inferior, as the ground was unsuited to their growth.

I cannot furnish a satisfactory statement in regard to the "cropping" of the farm and of the accounts, as I neither *purchase* nor *sell* any thing, the seeds being handed to me as required, and the produce consumed in the house, I have no opportunity of knowing the actual cost or value; also, the crop being gradually used before it can all arrive at perfection, prevents, to a great extent, my ascertaining the correct weight. However, I have furnished the tables of "statistics," as far as I can judge, correctly.

I may add that the boys were, for a considerable portion of their time, employed in floriculture, having the management of some pleasure grounds, and assisted also in the light work of an adjoining portion of ground during the year, which is not taken into account in the "statistics" or "balance sheet."

I hope next year to be able to present a more satisfactory report of our progress.

HUGH PETTIGREW, Assistant-teacher and Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Belfast Union Workhouse Farm.

TABLE showing the CROPPING of the Belfast Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation. Profit.	Result of Cultivation. Loss.	Observations.
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Cabbages, ...	0 2 17	From 6th October, 1853, to 24th June,	From 1st May to 30th December.	—	—	—	—	—	
Turnips, ...	0 1 14	28th March and 12th June,	May and December.	—	—	—	—	—	
Carrots, ...	0 0 20	21st April, . .	November.	—	—	—	—	—	
Parsnips, ...	0 0 7	5th April, . .	November.	—	—	—	—	—	
Onions, ...	0 0 12	28th March, . .	October.	—	—	—	—	—	
Leeks, ...	0 0 13	28th March, . .	Transplanted in Oct.	—	—	—	—	—	
Parsley, Lettuces, Cabbage Seeds, &c., . . .	0 0 4	—	—	—	—	—	—	—	
	1 1 7								
"STOLEN CROPS."									
Onions, ...	0 0 2	August.	—	—	—	—	—	—	
Nonpareil Cabbages, .	0 0 7	May, . . .	August.	—	—	—	—	—	
Borecole & Curled Kail, .	0 0 20	July.	—	—	—	—	—	—	
Leeks, ...	0 0 30	Transplanted in Oct.	—	—	—	—	—	—	
Third crop Curled Kail, .	0 0 7	August.	—	—	—	—	—	—	
	0 1 26								

(Signed), HUGH PETTIGREW, Teacher.

12th January, 1855.

II. Appendix to Dr. Kirkpatrick's Report.

Ballycastle Union Workhouse Farm.

2. BALLYCASTLE WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Antrim.

January 6, 1855.

Agricultural Instruction.—I am happy to state there has not been n able-bodied man in the house for some time, so that the farm is rincipally cultivated by the boys and a few old men, except in the usy season of the year, when, you will see by the balance sheet, I am bliged to employ both men and horses to have the work completed n its proper season.

I am also happy to state, as soon as the boys arrive at an age to it them for employment as servants, they are eagerly sought after by the farmers of this neighbourhood, and succeed very well, as many of the farmers, who took boys out, have expressed their satisfaction, both as to their industry and good conduct.

Workhouse Farm.—No change has taken place since my last Report, either in the extent of the farm (eight statute acres), or in the system of cropping pursued, viz., the ordinary "four-course rotation," which is found to suit the soil and climate very well. The produce for the past year was very fair, and the general result of the farm management most satisfactory.

I beg to express my thanks to your Board for its liberal recognition of my services, and to the agricultural Sub-Inspector for the assistance afforded by his suggestions; and I shall continue, with increased exertions, to carry out your instructions in the most satisfactory manner in my power.

GEORGE BUTLER, Master and Agriculturist.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballycastle Union Workhouse Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	71	4	6
,, Paid for Labour,	15	7	8
,, Free Labour of Pupils,	—		
,, Paid for Farm Seeds,	13	8	3
,, ,, Manures,	—		
,, ,, Cattle,	2	12	11
,, ,, Feeding Stuffs,	26	13	8
,, ,, Implements and Repairs,	3	16	6
,, ,, One year's Rent of Farm,	10	8	9
,, ,, ,, Poor Rate,	0	8	9
,, ,, ,, County Cess,	1	1	0
To Profit and Loss for balance, being gain on the year,	89	18	0
	£235	0	0

Cr.	£	s.	d.
By amount received for Grain,	64	19	6
,, ,, Roots, &c.,	15	11	7
,, ,, Cattle Sold,	43	3	1
,, ,, Dairy Produce,	43	15	10
,, ,, Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	67	10	0
	£235	0	0

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballycastle Union Workhouse Farm.

TABLE showing the CROPPING of the Ballycastle Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Cabbages, ...	0 1 27	March and April, .	July to January, .	4,900 plants, .	34 tons, . .	3 10 0	20 10 0	—	Considered a very fair crop.
Mangels, ...	0 2 8	April and May, .	November, . .	6¼ lbs. . .	26 tons, . .	4 12 0	21 8 0	—	
Turnips, ...	1 1 0	May, . . .	December, . .	5 lbs., . .	36 tons, . .	3 15 6	32 4 6	—	
Onions, ...	0 0 25	March, . . .	September, . .	21 lbs., . .	7½ tons, . .	5 10 0	32 16 8	—	
Vetches, ...	0 3 0	February, . .	July to September, .	—	—	1 10 0	—	—	Soiling for cows.
GRAIN.									
Oats, ...	3 1 14	March, . . .	September, . .	13 stones, .	—	—	—	—	This corn being sold on the foot, we cannot tell the exact produce of it.
GRASS.									
Grass, ...	1 2 17	—	—	—	—	—	—	—	Cut twice for hay and soiling.
Total, . .	8 0 11								
"STOLEN CROPS."									
Cabbages, . . .	0 1 19	—	—	—	—	—	—	—	We planted the rape and cabbage in the ground from which vetches were taken.
Rape, ...	0 2 24	—	—	—	—	—	—	—	
Total, . .	1 0 3								

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

6th January, 1855.

GEORGE BUTLER, Master, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Larne Union Workhouse Farm.

3. LARNE POOR LAW UNION AGRICULTURAL SCHOOL, County Antrim.

January, 1855.

Agricultural Instruction.—The number in the agricultural class is about the same as at the date of my last Report. Its members comprise those reading in the sequel and second classes, there being none farther advanced in literary acquirements in school at the present time. Their progress in the acquisition of agricultural knowledge must, therefore, be slow; yet I have reason to feel satisfied that their improvement has been as marked as could be anticipated under the circumstances. The time devoted to instruction in the science or theory of agriculture is an hour before breakfast, on three mornings of the week; three hours are given every day, before dinner, to the literary school, as required by the Poor Law Commissioners; and the remainder of the day is given on the farm. In summer the hours are from half-past two to six o'clock, and in winter, till twilight.

Model Farm.—The work of the farm during the year was almost exclusively performed by the boys of the establishment, although few in number, and rather weak to endure much fatigue. By persevering industry we were enabled to bring the cropping to a close by the middle of June, without having recourse to hired labour, except a few days in spring, of a man and horse carting out manure. However, throughout the entire summer, we had a pressure of work; in fact, it was more than we could accomplish to bestow the necessary after-culture on three acres of green crops; and this told badly on the onion crop, which was a failure in consequence of our inability to wage an almost constant warfare with the weeds, which, eventually, took the place of the crop; our time being exclusively devoted to other matters of still *greater* importance. The other crops, which consisted of turnips, mangels, carrots, and parsnips, were, on the whole, above an average; and the amount realized for them on the day of sale was £31 5*s.* 9*d.*

Live Stock.—There is no live stock kept here. I consider the want of it a defect in our system of agricultural industrial education, as without affording the boys an opportunity of becoming acquainted with the feeding and general management of cattle, their training must, of course, be imperfect.

Manure.—This is collected and preserved by the senior male paupers of the establishment, under the direction of the Master of the Workhouse, as the work is of a character too laborious for boys twelve years old, and we have only four above that age. But that they may not continue ignorant of its proper management, I occasionally give lessons in the school-room on the proper formation of the manure-heap; the nature and effects of manures, both liquid and solid.

Permanent Improvements.—No works of this kind were effected during the year, except widening and repairing a road that runs part of the way along the foot of the field. I contemplate its continuation the entire way as soon as we get stones collected from the grounds to bottom it; and when this shall have been completed, it will facilitate the carriage of the manure to, and produce from, the farm.

Progress of Agricultural Improvement in this locality, &c.—Gratifying symptoms of improvement in agriculture in this locality are everywhere apparent, owing to the diffusion of agricultural knowledge, and the impetus given to the agricultural community by the enhanced value of farm produce. The example, too, of judicious and systematic culture exhibited on the model farm, though not very eligibly situated in regard to proximity to roads, and not, therefore, so likely to attract attention as if otherwise located, must decidedly have a beneficial effect on the agriculture of the adjacent farms.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Larne Union Workhouse Farm.

But apart from these considerations, I may confidently assert that the farm and school are successfully fulfilling the objects for which they were established, namely, imparting to the youthful male paupers of the Union an amount of industrial and moral training, calculated to raise them to the position of skilful labourers, a class now so much required; thereby rendering them a blessing to themselves, and to those among whom their lot may be cast.

Concluding Observations and Suggestions.—With the diminished number of boys available for performing the labour of the farm, it will be impossible to pursue the course of culture heretofore followed by us. We must either diminish the quantity of land attached to the school, as suggested by Colonel Clarke, Poor Law Inspector, or devise a mode of tillage, whereby the deficiency of labour experienced by us in the cultivation of the farm during the past year, shall be obviated. I prefer the latter alternative; and, instead of the system previously adopted, namely, a four-course *green crop* shift, I intend to substitute a mixed system of husbandry, consisting of *white* and *green* crops, alternately. By adopting this method, the working of the farm may be expected to go on better, as there will not be a pressure at certain periods of the year, and nothing to do at other times. I submitted the views herein put forth to Mr. Brogan, Agricultural Sub-Inspector, at his last inspection, and he fully concurred in them.

JOHN WHITE, Schoolmaster and Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Larne Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	10	1	3
,, Paid for Labour,	2	14	3
,, Free Labour of Pupils,	—		
,, Paid for Farm Seeds,	1	5	4
,, ,, Manures,	—		
,, ,, Cattle,	—		
,, ,, Feeding Stuffs,	—		
,, ,, Implements and Repairs,	2	17	3
,, ,, One year's Rent of Farm,	9	4	6
,, ,, ,, Poor Rate,	0	4	2
,, ,, ,, County Cess,	0	11	1
To Profit and Loss for balance, being gain on the year,	14	9	2
	£41	7	0

Cr.	£	s.	d.
By amount realized on day of sale,	31	5	9
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	10	1	3
	£41	7	0

II. Appendix to Dr. Kirkpatrick's Report.

Larne Union Workhouse Farm.

TABLE showing the CROPPING of the Larne Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips, ...	1 0 25	May and June, .	—	4 lbs., . .	35 tons, . .	14 17 8	11 12 6	—	
Mangels, ...	1 0 19¼	May, . . .	—	5 lbs., . .	38 tons, . .	17 4 6	14 6 8	—	
Carrots, ...	0 0 31¾	April, . . .	—	8 lbs., . .	12 tons, . .	15 10 9	16 10 4	—	
Parsnips, ...	0 0 18	April, . . .	—	6 lbs., . .	5 tons, . .	14 16 4	8 9 2	—	
Onions, ...	0 1 16	March, . . .	—	14 lbs., . .	No return, .	26 2 6	—	30 0 0	
Total, . .	2 3 30								

(Signed), JOHN WHITE, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

4th January, 1855. JOHN M'CORMICK, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Clones Union Workhouse Farm.

4. CLONES WORKHOUSE AGRICULTURAL SCHOOL, County Monaghan.

January 10, 1855.

There has been no material change in the general management of the agricultural department of this establishment; there is, therefore, not much to communicate out of the ordinary course. I am happy to say that the crops have been remarkably good, with the exception of the potatoes, which were next to a total failure,—all cut off by the disease. It will be observed in the balance sheet that no credit is taken for them. The cultivation of the farm has, as usual, been carried on steadily by the boys, before and after school-hours, and their instruction, in both the theoretical and practical details of agriculture, has not been neglected. Of course, from the fluctuating nature of the residence of the boys in the Workhouse, it is impossible to expect any great amount of progress from them; but I make it a point to initiate them well into all the operations of farm management; and, above all, I endeavour to inculcate upon them the usefulness of acquiring, when boys, those habits of application and forethought which will form the only sure groundwork of their success in afterlife. This, I may remark, I have always considered not the least important part of the benefit which these little boys derive from their training here, as I find they are eagerly sought after, for servants, by the farmers in the neighbourhood, and that, with few exceptions, they give much satisfaction to their employers. I am sure it must be very gratifying to the guardians to hear the favourable accounts which, from time to time, have been made to them by their masters.

There are, at present, sixteen boys in the agricultural class, the average number for the year is not quite so much, whose acquaintance with the elemental principles of agriculture is very creditable, and whose practical application of their knowledge is well exemplified by the productive state of the farm.

To what extent the institution may be said to give a useful impulse to the agriculture of the locality, it would be hazardous to affirm; but, I am persuaded that it cannot be inconsiderable. The fact of so many enlightened and skilful young labourers being added to the farming population of the district, cannot fail to operate most beneficially. The operations of the farm, too, are brought prominently before the notice of the public, every facility of observation being afforded to persons who come to the Workhouse to hire the boys. When I cannot conveniently accompany them myself, I send some of the officers to walk with them over the grounds; and I believe they invariably express themselves well pleased with all they see.

I beg to submit the following extracts from the visitors' book of the year, which will be found to corroborate the statements herein made, as to the success of our labours in the agricultural department.

J. KIRKPATRICK, Master and Agriculturist.

There appears a fair amount of improvement since my previous visit, and I shall feel great pleasure in recommending that a gratuity may be awarded by the Commissioners of National Education to the Master, for his useful services in superintending the industrial training and instruction of the boys.

May 24, 1854. M. BROGAN, Agricultural Sub-Inspector.

I have pleasure in reporting on the clean and orderly state of the institution, and of the excellent system of agriculture carried out.

September 6, 1854. JOHN GILL, Dundalk.

I have great pleasure in stating, that what I have seen of the agricultural institution here has confirmed my belief of the probable usefulness of similar ones in this country. The proficiency of the pupils is fully proportioned to their ages. It reflects the highest credit on the Master.

September 29, 1854. THOMAS DUNLY, Ayrshire, Scotland.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Clones Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	44	6	0
„ Paid for Labour,	4	2	6
„ Free Labour of Pupils,	—		
„ Paid for Farm Seeds,	6	8	0
„ „ Manures,	—		
„ „ Cattle,	—		
„ „ Feeding Stuffs,	—		
„ „ Implements and Repairs,	—		
„ „ One year's Rent of Farm,	17	11	9
„ „ „ Poor Rate,			
„ „ „ County Cess,			
To Profit and Loss for balance, being gain on the year,	20	11	7
	£92	19	10

Cr.	£	s.	d.
By amount received for Grain and Hay,	32	18	11
„ „ Roots, &c., sold, £7 4*s*. 9*d*., consumed, £6 0*s*. 2*d*.,	13	4	11
„ „ Pony kept,	5	0	0
„ „ Dairy Produce,	—		
„ „ Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	41	16	0
	£92	19	10

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Clones Union Workhouse Farm.

TABLE showing the CROPPING of the Clones Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Swedish Turnips, . .	1 0 0	3rd week in May, .	—	6 lbs., . .	Not known.	—	—	—	
Cabbages, &c., . .	0 2 0	Successionally, .	—	—	Do.	—	—	—	
Potatoes, . . .	0 1 20	March, . . .	—	10 cwt., . .	Do.	—	—	—	
Leeks and Onions, . .	0 1 0	April, . . .	—	7 lbs., . .	Do.	—	—	—	
GRAIN.									
Oats, ...	4 0 20	March, . . .	—	10 stones, .	Do.	—	—	—	Sold by auction.
Barley, ...	1 0 0	End of April, . .	—	7 stones, .	Do.	—	—	—	
Rye, ...	1 0 0	February, . .	—	7 stones, .	Do.	—	—	—	
GRASS.									
Meadow land, . . .	0 3 0	—	—	—	—	—	—	—	Sold by auction.
Under cultivation, . .	9 0 0								
Yards and Roads, . .	1 2 0	—	—	—	—	—	—	—	
Total, . .	10 2 0								

(Signed,) J. KIRKPATRICK, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 13, 1855. Wm. Forster, Chairman.

5. CASTLEBLAYNEY WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Monaghan.

Castleblayney Union Workhouse Farm.

January 13, 1855.

Agricultural Instruction.—In the report I had the honour of forwarding twelve months ago, I stated that the number of pupils in the establishment was eighty-five, of whom twenty-five only were in the agricultural class; I have now to state that, although the gross number is at present but forty-four, whose ages vary from five to fifteen years, there are thirty of them in the agricultural class. They show a particular fondness for field work, and the greatest avidity for obtaining instructions, and their conduct has been so exemplary during the past year, that in no instance has there been a complaint made of inattention or misconduct of any description. The more advanced pupils have acquired a very extensive knowledge of the theory of agriculture, and are very expert in the use of the implements necessary in cultivation. They are capable of sowing all seeds required; and, as an instance of the improvement they have underwent, I may state that, on the eleventh of August last, ten of the elder and more advanced pupils were subjected to a searching examination by Mr. Brogan, Sub-Inspector, who expressed great satisfaction at the correct replies they were able to make to the most intricate questions put to them. The pupils composing the agricultural class receive agricultural instruction on five days of the week; and the time appropriated to such is from one to half-past one o'clock, P.M., which by no means infringes upon the ordinary school business.

Model Farm and Improvements.—The farm consists of 3A. 0R. 6P., statute measure, the whole of which has been under cultivation. We have adopted the three and five course rotations, in accordance with the directions of Mr. Brogan; and I feel pleasure in stating that, during the past year, our operations have been successful. We reclaimed a plot of ground last year, which had for years been neglected; we brought it into cultivation in spring last by planting it with potatoes, which, for the extent, was a very productive crop. This ground was not included in the rotation system referred to.

We are carrying out another improvement, which has also been suggested by Mr. Brogan, and which will be of great utility when perfected, that is, making a walk round a considerable portion of the farm; and there are various other improvements considered necessary by the Agricultural Inspector, which will engage our attention when this is completed.

Manures.—The solid manure is daily removed from all parts of the establishment to the manure heaps, where it is compactly put together, in order to prevent the escape of the gases as much as possible. The liquid manure is carefully saved by means of a new tank, and, as opportunity permits, is poured over the solid portion. We have used no portable manure.

Permanent Improvement.—The only permanent improvement effected during last year was the cultivation of the reclaimed portion of lea, referred to under a preceding heading.

Progress of Agricultural Improvement, &c.—I may be here permitted to state that for a few years past agriculture has been conducted on greatly improved principles; thorough draining has become very general, and there is much improvement visible in the management of farms in this locality; and I trust it will not be considered out of place to state, that we take a considerable share of credit to ourselves for having set them a good example, which has tended very much to make the lands more productive.

DAVID LOCKART, Teacher and Agriculturist.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Castleblayney Union Workhouse Farm.

TABLE showing the CROPPING of the Castleblayney Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Parsnips,	0 0 36½	10th April,	25th November,	4½ lbs.,	6 tons, 8 cwt.,	1 14 8½	1 3 9½	—	This crop was slightly attacked by the wire-worm.
Carrots,	0 0 36½	10th April,	28th October,	4½ lbs.,	6 tons, 3 cwt.,	1 14 8½	1 1 3½	—	
Potatoes,	0 2 10	22nd March,	21st October,	91 stones,	8 tons,	2 11 6½	15 8 5½	—	Good—very little diseased.
Cabbages,	0 2 25	28th April,	At different periods,	Planted 26 inches by 28 apart,	Not known,	1 19 2¾	7 17 7¾	—	Pretty good crop this year.
Onions,	0 1 12½	27th March,	8th November,	10½ lbs.,	Not ascertained,	1 19 10½	—	1 4 10½	Very indifferent, owing to the dryness of the weather at the time the seeds were sown.
Leeks,	0 1 12¼	27th March,	8th Nov. transplanted	6 lbs.,	Not ascertained,	1 13 10	—	1 3 10	
Turnips, Swedes,	0 1 16⅓	6th June,	4th December,	2¾ lbs.,	20 tons,	1 14 6	5 6 9	—	Pretty good crop, particularly the Aberdeens.
Turnips, Aberdeens,	0 1 16½	15th June,	November and Dec.,	5 lbs.,	25 tons,	1 14 6¾	5 12 6¼	—	The profit on the year's transactions is very small, in consequence of the failure in the onion and leek divisions.
GRASS.									
Grass,	1 0 0	—	—	—	—	—	—	—	Not yet brought under cultivation. The hay was sold to Captain Dorman for 28*s*.
Total,	3 0 6								
"STOLEN CROPS."									
Cabbages,	0 1 28	22nd August,	Not cut yet,	—	—	Not known	—	—	Transplanted after onions and leeks.
Leeks,	0 0 8	1st November,	Not yet pulled,	—	—	Not ascertained,	—	—	Transplanted after potatoes.
Total,	0 1 36								

(Signed), DAVID LOCKART, Teacher.

I certify that the foregoing Returns and Accounts are correct according to the best of my knowledge and belief.

13th January, 1855. S. M'BIRNEY, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Kilmallock Union Workhouse Farm.

6. KILMALLOCK POOR LAW UNION AGRICULTURAL SCHOOL, County Limerick.

January 12th, 1855.

Agricultural Instruction.—The number of boys in this class at present is considerably below that of any previous year. This is explained by the numbers generally getting low in the Workhouse, and especially by the fact that when a boy has acquired proficiency in the principles and practices of husbandry, the farmers in the neighbourhood are but too anxious to engage his services. In many cases I have to regret boys being prematurely taken away before they can have acquired any solid information of the business they are to follow in afterlife. I, however, have been often gratified to find some of those boys return to me for information as to the treatment of certain crops of which they had not obtained sufficient knowledge. For the most part, the boys under my care have been very well conducted; and they feel it very important to their future welfare to be well informed in the principles of agriculture. I could indeed wish that I was able to allow them a longer time for study, but as the farm is intended to be worked by the boys alone, I find I am not able to give them as much study as I could wish. Of the seventy-four boys in the class, half work each alternate day, while the other division attends the school.

Model Farm.—Notwithstanding the several inconveniences which had to be contended with in the tillage of the various crops, the produce on the whole was very good.

The turnips and mangels on the greater part of the farm fell short of the usual produce, owing to the fact of the "after tillage" not having been fully carried out, in consequence of the inadequate supply of labour; but a proof of the importance of such being carefully attended to, that part of the crop which was properly treated, produced nearly double the weight of the part on which the after-culture was neglected.

The potatoes were almost free from blight, under the same treatment as that of the year previous.

The oats on the farm fully realized my expectations, and was an excellent crop. The barley would have been an abundant crop also, were it not that it unfortunately lodged at an early period of the season, and was materially injured; this could have been prevented were I in a position to be able to get up more of the subsoil, but unfortunately my resources, as regards labour, are not such as to enable me to carry out my ideas to perfection.

The flax crop would also have been a good one, were it not for the reasons stated in the preceding paragraph. The seed was that saved the preceding year by myself, and was of a very superior quality.

Live Stock.—A few pigs have been kept at the suggestion of the master, Mr. Nelson, (who has invariably since his appointment devoted his best energies to forwarding every industrial project in the Workhouse). They are fed on the refuse matter of the cooking department, and of the farm, and with very good effect, as they have brought a large sum of money by economizing matters which would otherwise go to waste.

Manures.—The solid manures of the Workhouse are regularly carried to the site (which was made in May last) in the centre of the farm, and placed in layers with earth or mould. The liquid from the privies is also collected in boxes and removed from thence in a cart made for the purpose, and drawn by a donkey, from which the manure heap receives a top-dressing daily.

Permanent Improvements.—A large portion of ground between the

Kilmallock Union Workhouse Farm.

Workhouse and the public road (on which the earth, &c. from the foundations of the Workhouse buildings was placed, and which gave the farm a most untidy and unsightly appearance), is now under a course of reclamation, and when completed will add materially to the improved appearance of the farm. A main drain, with a few parallel drains, is opened, and at present in progress of completion.

During the past year there has been a tank erected for the reception of the liquid manure; but it is of so imperfect a construction that I am afraid it is of little use, neither the sides nor the bottom have been cemented, consequently spring water can have free access. I, however, yet hope to be able to satisfy the Board as to the importance of these matters.

Progress of Agricultural Improvement.—The people of this locality are very prone to dairy farming; and with the exception of a few gentlemen's farms I cannot see any coming up to the mark of what I could call an improved system of agriculture. It is true, however, that in some instances good has been done, I consider, from the example set them in the cultivation and produce of the model farm. As regards the treatment of their cattle I cannot at all concur in their management, as they are invariably in the habit of allowing them to remain exposed to the inclemency of the weather during the night, and at all seasons of the year.

Concluding Observations.—I beg to refer to the accompanying report and statistics submitted to the Board of Guardians at their meeting on yesterday, and which was read and approved of by them. It shows the profits derived from the farm for the four last years, and although these profits fluctuate considerably, this is explained by the fact of the Poor Law Commissioners requiring the year to be closed on the 29th September, when only an imaginary valuation could be taken. However this year the accounts were kept open until nearly all the produce was sold, and I am therefore enabled to submit a correct return. I might also observe that I intend to change one of the rotations, and to grow none but green crops in the "Five-Course Shift," finding that they are all required for use in the Workhouse, and I have no doubt but that the produce will be more remunerating.

PATRICK F. O'HAGAN, Agriculturist.

To the BOARD of GUARDIANS of the KILMALLOCK UNION.

GENTLEMEN,—I beg leave to furnish you with a Report on the management of the Workhouse farm since August, 1851.

When I commenced my duties, at the date above referred to, the farm was subdivided by crooked and useless fences—along the boundary was a large portion of ground perfectly waste—in short, there was about 1A. 3R. occupied with interior fences, &c., which would at least, under careful tillage, bring from £25 to £40 a-year. The soil was for the most part overrun with weeds of the very worst description; the manure of the Workhouse (which was always intended for the farm) was in a great measure allowed to run to waste for want of care and attention in its proper collection and management, and there was no regular way of getting through the farm, nor was there any regular system of cropping pursued.

Improvements since effected.—All the old fences are now levelled—the waste along the boundary has been reclaimed—the soil for the most part is thoroughly cleared of weeds, and enriched with manures, which have been more carefully collected and applied than formerly. Some of the farm and Workhouse grounds have been drained, and the waste of head-lands prevented, as well as the loss of time in horse labour economized by a road which is now made in a proper place on the farm.

A systematic and orderly course of cropping has been fully established, which will tend to increase the fertility of and diminish the growth of weeds in the soil, and also afford the opportunity (in most cases) of taking two or three crops off the same portion of ground in one year.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Kilmallock Union Workhouse Farm.

The Profits.—In reviewing the accounts of the farm for the last four years, I ad that the profits arising from the labour of the pauper boys, is as follows:—

	£	s.	d.
Year ended the 31st December, 1851, .	58	8	11
Do. 31st December, 1852, .	207	0	0
Do. 29th September, 1853, .	63	2	9½
Do. 29th September, 1854, .	7	18	5¾
Total for the four years, ...	£336	10	2¼
Average on the four years, ...	£84	2	6½

I find also that the amount paid in Salaries, which should not be charged to he farm, (as compensation is given for it in the instruction afforded the boys) s as follows:—

	£	s.	d.
Year ended the 31st December, 1851, .	36	15	0
Do. 31st December, 1852, .	58	0	0
Do. 29th September, 1853, .	32	10	0
Do. 29th September, 1854, .	48	9	0
Total for the four years, ...	£175	5	0
Average for the four years, ...	43	16	3
Average for pauper labour for do.	84	2	6½
Total, being the profits per year, ...	£127	18	9½

This latter sum when divided by the number of acres *now* available for cropping, (27 statute) leaves a net annual gain per acre of £4 12*s.* 6½*d.*

It appears that the items in the stock taken on the 31st December, 1852, and that of the 29th September, 1853, did not produce (in quantity or price) in accordance with their valuation, which caused the profits of this year in particular to be very low, although in reality the profits are greater than that of the years previous. The stock which was taken on the 23rd December for the 29th September last is *perfectly correct*, as the items of which it was composed were all sold, with the exception of forty tons of turnips, eight tons of hay, and seven and a-half tons of barley straw.

I have the honour to remain, Gentlemen,
Your obedient servant,
P. F. O'Hagan, Agriculturist.

Kilmallock Workhouse, January 3rd, 1855.

[Summary, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Kilmallock Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	385	19	5½
„ Paid for Labour,	40	6	1
„ Free Labour of Pupils,	—		
„ Paid for Farm Seeds,	14	17	5½
„ „ Manures,	27	0	0
„ „ Agriculturist's Salary and Rations,	48	0	0
„ „ Feeding Stuffs,	—		
„ „ Implements and Repairs,	2	0	6
„ „ One year's Rent of Farm,	50	6	10
„ „ Poor Rate, „ „ County Cess,	4	19	6
To Profit and Loss for balance, being gain on the year,	7	18	5¾
	£581	8	3¾

Cr.

	£	s.	d.
By amount received for Grain,	174	17	3½
„ „ Roots, &c.,	114	2	10¼
„ „ Cattle Sold,	—		
„ „ Dairy Produce,	—		
„ „ Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year,	292	8	2
	£581	8	3¾

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Kilmallock Union Workhouse Farm.

TABLE showing the CROPPING of the Kilmallock Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips, ...	7 0 0	May, . . .	December, . .	4 lbs., . .	16 tons, nearly,	8 19 2½	4 11 8	—	
Mangels, ...	1 0 0	May, . . .	November, . .	7 lbs., . .	18 tons, 15 cwt.,	—	9 11 9¾	—	
Potatoes, ...	0 2 0	March, . . .	August, . . .	12 cwt., . .	159½ cwt., .	—	12 6 1¾	—	
Onions, ...	0 1 0	March, . . .	Nov. and December,	About 15 lbs., .	208 stones, .	—	1 4 5¾	—	
GRAIN.									
Oats, ...	6 0 0	March, . . .	August & September,	7 stones,	160¼ stones, 1½ tons straw,	—	—	1 0 1½	
Barley, ...	7 0 0	April, . . .	August & September,	6 stones,	149 6/7 stones, 1 ton, 17½ cwt. straw,	—	0 3 7¾	—	
Flax, ...	1 0 0	April, . . .	August, . . .	3½ bushels, .	50 cwt. straw, .	—	—	1 9 2½	
GRASS.									
Italian rye-grass and red clover, ...	4 1 0	—	June, . . .	—	87 cwt., . .	—	—	5 4 1¼	
Total, . . .	27 0 0								

December 27th, 1854.

(Signed), PATRICK F. O'HAGAN, Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Newcastle Union Workhouse Farm.

7. NEWCASTLE UNION WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Limerick.

Agricultural Instruction.—The boys under my care (aged from nine to fifteen) receive agricultural instruction every morning for one hour. They then work at the farm until breakfast, which is generally about ten o'clock. They attend a literary school after breakfast hour until one o'clock, after which, they work again on the farm until dinner, which is about four o'clock in winter, and five in summer. The number fluctuates very much, many of them being eagerly sought for by farmers this year. The daily average for the year was thirty.

Model Farm.—The four-course rotation was completely established, and wheat for the first time was sown in the clover late in December, (not being able to get the land sooner from the parties who purchased the clover). I beg to call attention to an experiment which I made relative to the transplanting of wheat. The worm having made dreadful havoc, about a rood of it being apparently eat off, I harrowed it with a common harrow, and rolled it same day with a very heavy roller. In a few days I saw the plants which had been torn up by the harrow growing vigorously. This led me to understand that wheat, if transplanted, would do well. I then transplanted this rood, finding plants enough to spare in other parts, and though doing it under unfavourable circumstances, (the plants being too old, and the weather very dry), yet, it proved to be the most prolific part of the crop. The wheat braird is also attacked in the same way at present, and I have shaken coarse salt on it at the rate of one ton to the Irish acre; but it would be much better to shake it on the grass before the ploughing, as it would come in contact more immediately with the vermin nursed by the preceding crop of clover.

Manures.—There is a liquid manure tank into which all the sewers leading from the laundry and all other parts of the establishment are discharged, and attached to it is a large manure pit, in which all rubbish and cleanings, &c., of the establishment are deposited. The surplus of liquid manure is sold to the surrounding farmers, and will be a means of enriching the surrounding locality. I procured a cart, and had a large manure box made to fit the cart, this I hired to the farmers by the day. The Board have now ordered me from Dublin a liquid manure cart, pump, and distributer, for the sum of £18. I hope to be able to give a very favourable report of its results in my next Report.

Permanent Improvement and preparatory culture of the Wheat.—The clover lea was ploughed into beds eight feet wide, and then rolled so as to make the surface level for the seed, which was sown broad-cast. The furrows (fifteen inches wide) were dug deeply, and shovelled on the beds as covering. They were then subsoiled and shovelled on the surface. When the wheat was removed, I ploughed the land, having the furrows in the centre of the beds, which I am now subsoiling, thus nearly one-third of the plot is subsoiled by this course, two-thirds will be done the next, and the entire, the third course; each division will be treated in the same way as the wheat shifts over the farm. This mode of proceeding is to be recommended very much to the small farmers, as they can gradually subsoil their farms in this way.

Progress of Agricultural Improvement.—Many of the farmers of this locality are becoming acquainted with the improved course of husbandry, and though they do not carry out a systematic rotation, yet they grow very good crops. They frequently visit the Workhouse farm, and see its course of cultivation.

LAWRENCE O'SHAUGHNESSY, Agriculturist.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Newcastle Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	207	5	3
" Paid for Labour, Watchman's hire, Miscellaneous,	74	4	9½
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	16	14	1½
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	10	13	4
" " One year's Rent of Farm,	17	6	0
" " " Poor Rate,	—		
" " " County Cess,	—		
To profit and Loss for balance, being gain on the year,	145	12	9
	£471	16	3

Cr.

				£	s.	d.
By amount received for Grain,				221	14	6½
" " Roots, &c.,				52	0	11
" " Cattle Sold,				—		
" " Dairy Produce,				—		
" " Eggs and Poultry,				—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,				198	0	9½
There was a deficiency in last year's estimate of	£37	19	9½			
Free Labour of Pupils added,	38	15	7			
Total gained this year,	106	17	2			
	£183	12	6½			
				£471	16	3

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Newcastle Union Workhouse Farm.

TABLE showing the CROPPING of the Newcastle Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Value of Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.				£ s. d.	£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips, . . .	3 1 0	20th May, . .	1st December, .	4 lbs., . .	18 6 8	5 19 6	12 6 9½	—	The turnip seed was saved on the farm the previous year.
Mangels, . . .	1 1 0	15th April, . .	1st November, .	4 lbs., . .	10 0 0	5 19 8	4 0 4	—	
Onions, . . .	0 1 20	End of March, .	September, . .	14 lbs., . .	54 15 5	11 9 5	43 6 0	—	There were several blanks in the onions, in which cabbage seeds, of sorts, were sown, and afterwards transplanted; of these there are over 80,000, and valued to £10, and 17¾ cwt. sold at 6*d.* per cwt.
GRAIN.									
Wheat, ...	6 0 20	15th December, .	September, . .	10½ stones, .	13 6 11½	6 19 1½	6 7 10	—	
Barley, ...	4 3 20	1st April, . .	September, . .	10½ stones, .	18 0 8	6 13 7½	11 6 7½	—	
GRASS.									
Red clover and Italian rye-grass,	4 0 20	1st April, .	1st cutting 15th May, last cutting 20th November, . .	10lbs. redclover, & 1 bushel Ital. rye-grass, .	5 18 0½	1 10 9	4 7 3½	—	
Total, . .	20 0 0								

(Signed),

I certify that the foregoing Returns and Accounts are correct according to the best of my knowledge and belief.

LAWRENCE O'SHAUGHNESSY, Teacher.

EDWARD CURLING, Manager.

18th January, 1855.

Monaghan Union Workhouse Farm.

8. MONAGHAN UNION WORKHOUSE AGRICULTURAL SCHOOL.

4th January, 1855.

Agricultural Instruction.—The Agricultural Class at present consists of fifteen boys, selected from the sequel and third classes of the school. They receive agricultural instruction for half an hour each day. The text books used are the Agricultural Class Book and Murphy's Agricultural Instructor. Owing to the fluctuating nature of the attendance much cannot be effected; but, however, those who attend regularly are making fair progress.

The Industrial Class consists of but ten boys, comprising all those in the Agricultural Class, with the exception of those who attend the weaving. They work on the farm for two hours daily, and in general take great interest in their work.

Model Farm.—This consists of about one acre, allocated for the industrial training of the boys. The crops cultivated last year were, potatoes, turnips, mangel, cabbage, onions, and carrots. The carrots failed, owing, I believe, to bad seed, and mangel was dibbled in their place. The other crops succeeded very well.

There has been, as yet, no regular system of rotation followed.

I intend to adopt a six-course shift, for which purpose I will divide the land into six equal portions, and crop it in the following manner, viz. :—first year, cabbage; second year, mangel; third year, potatoes; fourth year, turnips; fifth year, carrots and parsnips; sixth, onions. The above shows the different crops on the same division during the course of the rotation.

As it is but three months since my appointment, I have not been able to effect much improvement in the agricultural department as yet, but I will endeavour to carry out your views as efficiently as possible, and trust to be enabled to forward a satisfactory Report for the ensuing year.

JAMES GILLESPIE, Teacher and Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Monaghan Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	—		
" Paid for Labour,	—		
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	0	17	4
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	—		
" " One year's Rent and County Cess,	2	6	6
" " " Poor Rate,	—		
To Profit and Loss for balance, being gain on the year,	13	6	8
	£16	10	6

Cr.	£	s.	d.
By amount received for Grain,	—		
" " Roots, &c.,	16	10	6
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	—		
	£16	10	6

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Monaghan Union Workhouse Farm.

TABLE showing the CROPPING of the Monaghan Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 0 25	March,	August,	Not known,	614 stones.	—	—	—	I have not been able to find out the expense or profit per statute acre, as all the work was performed by the boys, and therefore there was no expense attending it, and no rent charged for farm.
Turnips,	0 0 40	May,	Not raised,	4½ lbs.,	18 tons.	—	—	—	
Mangels,	0 0 43	May,	November,	5 lbs.,	20 tons.	—	—	—	
Cabbages,	0 0 50	May,	As used,	—	Not known.	—	—	—	
Onions,	0 0 20	April,	September,	4 lbs.,	Not known.	—	—	—	
Carrots,	—	—	—	—	—	—	—	—	Failed: mangels dibbled in place.
Total,	1 0 18								

(Signed), JAMES GILLESPIE, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

5th January, 1855.

JAMES MITCHELL, Manager.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Clonmel Union Workhouse Farm.

9. Clonmel Workhouse Agricultural National School, County Tipperary.

Agricultural Class.—This class contains eighty boys, selected from the higher classes of the school, who receive agricultural instruction, after work, for half an hour on five evenings each week. The time for this instruction was changed, as it was found impossible to teach in the morning, owing to unavoidable bustle and noise while making up beds, cleaning, &c., in dormitories immediately over the school-room.

Industrial Class.—One hundred and twenty boys work on the farm at present, in divisions of forty, each day, so that they have two out of three days at school.

Though forty of the boys working on the farm are not included in the "Agricultural Class," they attend the agricultural lectures; and as they belong to the lower classes in the school, I intend after a time giving them separate instruction as a *junior* class, from which, according as they acquire proficiency, they will be advanced to the *senior* class. I generally lecture two evenings in succession, and examine the third, which calls forth the attention and memory of the pupils, and stamps the subject on their minds. With few exceptions they seem most desirous to learn the principles of agriculture, and they perform their work with great cheerfulness.

The attention of the boys, while at work, is frequently called to the manner in which the different practical operations are performed, and no opportunity is lost of impressing on their minds the great necessity of acquiring industrious habits, and of adhering to truth and honesty—traits of character so essential in servants. Such discourses I have found to make a strong impression for the better on their tender minds.

Farm Management.—I was obliged to change the *courses* of rotation given in my last Report, in consequence of the deficient supply of manure and labour, occasioned by the decrease in the number of paupers.

I have now adopted the following rotation, which is better adapted to our present circumstances, and which will be in full operation the second year:

FIRST YEAR.	SECOND YEAR.
No. 1. Potatoes, onions, and turnips.	No. 1. Wheat, laid down with grass-seeds.
,, 2. Carrots, parsnips, beet, and mangel.	,, 2. Potatoes, onions, cabbage, and turnips.
,, 3. Oats.	,, 3. Carrots, parsnips, beet, and mangel.
,, 4. Cabbage and turnips.	,, 4. Oats.
,, 5. Wheat, laid down with grass-seeds.	,, 5. Grass, for hay or soiling.

Should the supply of manure and labour increase, cabbage may be substituted for oats, and the breadth of turnips increased.

Permanent Improvements.—The remainder of the internal fences have been levelled; the necessary roads laid off and paved with stones obtained from the old fences; four and a-half English acres were subsoiled; the boundary wall has been completed all to sixty English perches, which will be finished the ensuing spring; steads for dung-heaps have been made, and a ground hedge planted round the cemetery.

. . . . . .

The profits for this being considerably less than for last year, will be accounted for by the failure of our onions and carrots—the potatoes being checked in growth by blight before they came to maturity, and their being ordered for the paupers at a rate of *5d.* per stone by the

Guardians, when the average price in market was 6½*d.* to 7*d.* per stone. I find the turnips on the ground were undervalued by the valuators, as I sold them since.

Manure.—This is collected from every available source about the establishment, and is made up in alternate layers, thus:—first, earth; next, straw; then excrements and weeds; and lastly, the whole covered with earth. The pulverized earth on top and bottom prevent the most valuable parts of the dung from escaping. The heaps are kept loose to promote rapid fermentation, and are turned and thoroughly mixed a month or six weeks before using. I regret to state that up to the present this farm could not be considered as a "model" for the neighbouring farmers, there being a large portion of it waste every year since it came into possession, for want of the necessary means of working it; but now that a couple of mules and carts, with the necessary implements, have been provided, mainly through the kind interference of Joseph Kenny, Esq., D.V.C., I expect our example in future will be worthy of imitation.

JOHN KENNY, Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Clonmel Union Workhouse Farm.

TABLE showing the CROPPING of the Clonmel Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation. Profit.	Result of Cultivation. Loss.	Observations.
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	-
Potatoes, Pinks,	8 1 12	15th Feb. to 15th Mar.	August,	4½ barrels,	36½ barrels,	9 7 6	5 2 3½	—	About 16 per cent. diseased of tubers. The blight appeared first where the soil was richest.
Potatoes, Baronites,*	1 1 37	15th to 30th March,	September,	5 barrels,	21½ barrels,	7 15 6	0 14 6	—	
Potatoes, Leather-coats,	0 1 37½	15th April,	September,	5 barrels,	20 barrels,	8 14 0	—	2 0 8	
Onions,	0 2 0	1st to 8th April,	September,	12 lbs.,	—	11 10 0	—	8 5 6	This crop failed in consequence of late frost, and drought in May.
Parsnips,	2 3 14	1st to 8th April,	15th December,	5 lbs.,	7 tons,	7 3 0	9 14 6	—	
Turnips, Laing's Swede,	1 0 22	29th May,	December,	3½ lbs.,	15 tons,	9 6 0	2 4 0	—	On this part the carrots failed—about two seeds in a yard germinated.
Turnips, Skirving's do.,	4 0 17¾	15th to 28th May,	Dec. & 1st week Jan.,	3½ lbs.,	16 tons,	8 0 6	3 15 6	—	
Turnips, Do. do.,	1 2 34⅜	1st to 8th June,	January,	3½ lbs.,	12 tons,	7 9 6	0 10 6	—	
Turnips, Do. Hybrid,	0 2 14	10th to 15th June,	January,	3½ lbs.,	14 tons,	7 8 0	0 12 0	—	
Cabbages,	2 2 4	July and August,	—	8,712 plants,	20 tons, 12 cwt.,	9 11 6	2 10 6	—	
Flax,	0 2 6½	20th April,	16th August,	2¾ bushels,	Not ascertained,	—	—	—	The soil being naturally dry, the drought in May rendering it still more so, the crop grew of unequal length. I consider the soil too dry to grow flax to perfection.
Hemp,	0 0 21½	1st May,	16th August,	2½ bushels,	Not ascertained.	—	—	—	
GRASS.									
Bare fallow,	3 2 6½	—	—	—	—	4 3 2	—	4 3 2	
Cemetery,	0 1 17½	—	—	—	—	—	—	3 8 0	
Roads and Dung,	—	—	—	—	—	—	—	—	
Steads,	1 1 9	—	—	—	—	—	—	—	
Pasture,	0 1 26¾	—	—	—	—	—	—	—	
Total,	30 0 0								

(Signed,) JOHN KENNY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

13th January, 1855.

P. PHIPPS, Manager.

* I did not observe any diseased tubers when raising this crop.

Carrick-on-Suir Union Workhouse Farm.

10. CARRICK-ON-SUIR UNION WORKHOUSE AGRICULTURAL SCHOOL, County Tipperary.

26th January, 1855.

Agricultural Instruction.—The agricultural class at present consists of twelve boys, and their progress in this department has been very creditable, considering the age of most of the pupils, and their constant shifting in and out of the Workhouse, which is a very serious drawback to their improvement.

Model Farm.—I am happy to say that the balance sheet for the year affords a satisfactory proof that the system of cropping, and mode of cultivation here is creditable. The Royal Dublin Society at the late annual autumnal exhibition, awarded this Union the second prize for Workhouse farm produce.

The agricultural department is conducted in a manner so as to give satisfaction to the Agricultural Inspector, to the Guardians of the Union, and to every other visiter to the establishment; for, besides cultivating our farm on improved principles, and producing good crops, we train up a useful class of boys who obtain employment from farmers within the Union according as they are fit.

Manures.—By the excellent and judicious system of house-feeding adopted by the Guardians, which I am happy to state is very successful, I am enabled to manure one-fourth of the farm with yard manure, at the rate of thirty tons per acre, each year. This manure is collected and preserved in a water-tight pit, and improved in quality by the constant addition of the liquid and night-soil from the privies.

In the early part of spring (February) the heap is turned, by which all the different substances of which it is composed are evenly incorporated.

Live Stock and Dairy Management.—The stock at present on the farm consists of three milch cows, and three draught animals. The Guardians have made an order to purchase eight more milch cows immediately, the entire of which will be supported exclusively on the produce of the farm. Immediately after the cows are milked morning and evening, the milk is brought to the Workhouse for consumption, thus securing the readiest market for it.

One-half the agriculturist's salary and rations, and half the salary of a night watchman are debited to the farm under the head of labour. Neither of these items being debited the previous year, the profit appears consequently less for this year; and another reason why the profit is so small is, that last year was the first in which cows were kept, and the crops were not sufficient for house-feeding the number (ten) on hands, consequently, a large quantity of food had to be bought at a high price, every description of produce having during that year rated high. I should also observe that the Guardians only allowed sixpence per gallon for the milk during the winter, and fourpence during the summer half-year. However, the more efficient training afforded the boys working on the farm, and the greater facility that now exists of procuring them employment, is considered the most satisfactory and conclusive source of profit.

RICHARD POWER, Agriculturist.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Carrick-on-Suir Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	227	8	2	By amount received for Grain,	58	17	3
„ Paid for Labour, Salary Agriculturist and Watchman,	39	17	4	„ „ Straw,	13	10	0
„ Free Labour of Pupils,	—			„ „ Roots, &c., consumed in house,	32	9	0
„ Paid for Farm Seeds, &c.,	18	12	3	„ „ Cattle Sold,	115	5	6
„ „ Manures,	0	6	0	„ „ Dairy Produce,	37	10	11$\frac{2}{4}$
„ „ Cattle,	62	1	0	„ „ Eggs and Poultry,	—		
„ „ Feeding Stuffs,	21	9	10	By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	185	9	10
„ „ Implements and Repairs,	6	15	2¼	3A. 3R. of land under grave-yards, not under cultivation until the Railway Company erect a suitable bridge over the line on the land,	13	9	0
„ „ One year's Rent of Farm,	116	6	0	Loss on the year,	36	4	2¾
„ „ „ Poor Rate,	—						
„ „ „ County Cess,	—						
	£492	15	9¼		£492	15	9¼

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Carrick-on-Suir Union Workhouse Farm.

TABLE showing the CROPPING of the Carrick-on-Suir Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.	
							Profit.	Loss.
	A. R. P. Y.					£ s. d.	£ s. d.	£ s. d.
GREEN FALLOW CROPS.								
Carrots,	0 0 32 4	March,	November,	—	—	—	—	—
Parsnips,	0 0 32 4	March,	November,	—	—	—	—	—
Cabbage,	0 3 9 6	March,	Oct., Nov., and Dec.,	—	—	—	—	—
Onions,	0 0 32 4	March,	September,	—	—	—	—	—
Leeks,	0 0 32 4	March,	Still in Land.	—	—	—	—	—
Mangels,	5 2 27 4	April and May,	November,	3 lbs.,	18tns. 10cwt. 2qrs.	—	—	—
Turnips,	4 0 8 2	May, June, and July,	Still in Land,	3½ lbs.,	15tns. 8cwts. 2qrs.	—	—	—
Vetches,	1 2 19 2	February,	August,	12½ stones,	—	—	—	—
GRAIN.								
Oats,	4 3 17 5	March,	August,	12 stones,	15 barrels, 2 lbs.	—	—	—
GRASS.								
Clover and Rye, mixed,	8 0 38 3	March,	October,	—	—	—	—	—
Total,	28 0 3 3							
"STOLEN CROPS."								
Cabbage,	1 2 19 2	August.	—	—	—	—	—	—
Rape,	0 1 24 8	August.	—	—	—	—	—	—
Vetches,	0 3 9 6	September,	—	—	—	—	—	—
Total,	2 3 12 16							

Crops Cultivated.	Observations.
Carrots,	Used in Workhouse.
Parsnips,	Used in Workhouse.
Cabbage,	Used in Workhouse.
Onions,	Used in Workhouse.
Leeks,	
Mangels,	On hands for black cattle.
Turnips,	On hands for black cattle.
Vetches,	Used by cows.
Oats,	Consumed in Workhouse.
Clover and Rye, mixed,	Consumed by black cattle on farm.

(Signed,) RICHARD POWER, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

24th January, 1855.

L. H. JEPHSON, Chairman of Board.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Tipperary Union Workhouse Farm.

11. TIPPERARY WORKHOUSE NATIONAL AGRICULTURAL SCHOOL.

5th January, 1855.

Agricultural Instruction.—There are at present in the male school 190 pupils instructed by two teachers, and divided into two classes:—first, the trades and farm boys; second, those who are incapacitated for labour. The former are taught from half-past eight o'clock to half-past eleven, and the latter from twelve to three.

Industrial Class.—Eighty boys work on the farm, in two divisions of forty, each alternate day, and the result of their labour has been highly satisfactory. I have observed that the boys who are employed in the open air assume a strong and healthy appearance, and the dexterity they have acquired in spade husbandry must tend to make them good and active labourers in afterlife.

Agricultural Class.—Of the eighty boys employed on the farm, forty-five are selected from the senior classes, and instructed in the different agricultural subjects suited to their capacity.

Cultivation of the Farm.—In my last Report I explained the course of cropping then pursued, viz:—a four-course rotation, but by directions of Mr. Brogan, I have changed to a three-course, and divided the farm according to the change. In No. 1, turnips; No. 2, onions, leeks, cabbages, and mangels; No. 3, parsnips, and carrots. The only drawback I have to advert to is the total failure of 1A. 3R. 33P. of carrots. The seed was sown the first week of April, and I paid the greatest attention to the preparation of the land for its reception, but was obliged to substitute turnips in its stead, which did tolerably well, and in a great measure prevented the loss which would otherwise be experienced.

Manure.—I consider it of the utmost importance to pay the strictest attention to the management and collection of manure. Therefore I have it dug into the land in autumn; for by doing so, it is preserved without waste, and the decomposition it undergoes in the soil renders the latter friable, and it becomes prepared food for the plants, ready to be taken up in the spring.

Permanent Improvements.—I have had four perches of an old ditch thrown down, and a regular fence constructed in its stead. The superfluous earth I used to fill up an adjacent gripe, after clearing it out and making a stone drain in the bottom, thereby increasing the arable extent of the farm.

In consequence of being obliged to hold over the produce for consumption in the house, I have experienced a great loss in the turnips, particularly as they were of a large and rich description, a great quantity of them rotted; but were it allowed to make sale of them, the balance sheet would show a greater gain than it now does.

JOHN MOLONEY, Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Tipperary Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	119	7	8
„ Paid for Labour,	—		
„ Free Labour of Pupils,	—		
„ Paid for Farm Seeds,	5	18	10
„ „ Manures,	10	0	0
„ „ Cattle,	—		
„ „ Feeding Stuffs,	—		
„ „ Implements and Repairs,	—		
„ „ One year's Rent of Farm,	15	18	3
„ „ „ Poor Rate,	—		
„ „ „ County Cess,	—		
To Profit and Loss for balance, being gain on the year,	97	4	5
	£248	9	2

Cr.	£	s.	d.
By amount received for Grain,	—		
„ „ Roots, &c.,	124	12	5
„ „ Cattle Sold,	—		
„ „ Dairy Produce,	—		
„ „ Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	123	16	9
	£248	9	2

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Tipperary Union Workhouse Farm.

Table showing the Cropping of the Tipperary Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
Green Fallow Crops.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Onions,	0 3 31	March,	18th September,	8 lbs.,	3¾ tons,	9 2 8	20 17 4	—	
Leeks,	0 1 0	March,	Not Harvested,	8 lbs.,	—	9 2 8	—	—	
Parsnips,	1 0 26	27th Mar. to 4th April,	27th November,	5 lbs.,	7 tons,	7 15 10	15 8 10	—	
Carrots,	1 3 38	April,	4th December,	5 lbs.,	6½ tons of turnips and 2 tons of carrots,	7 15 10	1 11 2	—	
Mangels,	0 2 15½	2nd May,	13th November,	8 lbs.,	16½ tons,	7 0 0	9 10 0	—	
Cabbages,	0 2 15¼	1st March to 20th April,	June to December,	—	—	5 16 0	11 14 0	—	
Turnips,	3 1 8	21st May to 10th June,	December,	8 lbs.,	14 tons,	5 10 0	9 7 0	—	
Under small seeds,	0 0 3	—	—	—	—	—	—	—	
Grain.									
Grass.									
Total,	8 3 12								
"Stolen Crops."									
Cabbages,	1 0 0	August,	Not harvested.	—	—	—	—	—	
Total,	1 0 0								

(Signed),

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 6, 1855.

John Moloney, Teacher.

W. H. [illegible], Manager.

12. CASTLELAKE AGRICULTURAL SCHOOL, CASHEL UNION, County Tipperary.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Cashel Union Workhouse Farm.

December 31, 1854.

Agricultural Instruction.—An agricultural class, consisting of sixty boys, received theoretical and practical instruction in agriculture daily rom me, from my appointment in May till transferred to the parent house n November last. Thirty-seven of this class had left the Workhouse prior to the visit of Mr. Brogan, Agricultural Sub-Inspector, in July ast. The boys were transferred to the parent Workhouse on the 31st August, when I was deputed to act in the double capacity of agriculturist and wardmaster, from that time to the 27th November; in consequence of which the boys did not receive any agricultural instruction, and the farm was entirely neglected during that interval.

School Farm.—The principal part of the crops has been disposed of by auction, viz., oats, barley, meadowing, turnips, and cabbages; the remainder having been kept for the house consumption.

Manures.—There is a pit on the farm for the collection of solid manure; but there is no means of collecting the liquid yet provided, though there have been seven cwt. of guano used on two acres of turnip ground, for the want of other manure.

In conclusion, I beg to express a hope that my humble endeavours in future to carry out the views of the Commissioners, as regards the training of the Workhouse boys in the improved mode of agriculture recommended by them, will justify my claim for their patronage.

WILLIAM LAMBE, Agriculturist.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Cashel Union Workhouse Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	7	0	0
„ Paid for Labour,	0	8	0
„ Free Labour of Pupils,	2	11	0
„ Paid for Farm Seeds,	14	0	0
„ „ Manures,	4	13	4
„ „ Cattle,		—	
„ „ Feeding Stuffs,		—	
„ „ Implements and Repairs,		—	
„ „ One year's Rent of Farm,	23	15	0
„ „ „ Poor Rate,		—	
„ „ „ County Cess,		—	
To Profit and Loss for balance, being gain on the year,	67	7	6½
	£119	14	10½

Cr.	£	s.	d.
By amount received for Grain,	15	13	9
„ „ Roots, &c.,	66	1	1½
„ „ Cattle Sold,		—	
„ „ Dairy Produce,		—	
„ „ Eggs and Poultry,		—	
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	38	0	0
	£119	14	10½

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report

Cashel Union Workhouse Farm.

TABLE showing the CROPPING of the Cashel Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
None, ...	—	—	—	—	—	—	—	—	From the information I can get there was about £14 worth of seed sown before I took office.
GRAIN.									
Oats, . . .	3 0 0	March, . . .	August, . . .	9 stone, .	16 barrels.				
Barley, . . .					25 barrels.				
GRASS.									
Perennial Grass, .	3 0 0	May, . .	August, 1855, .	1 bushel.					
Clover, . .				1 stone.					
Total, . .	6 0 0								
"STOLEN CROPS."									
Total, . .									

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

(Signed), WILLIAM LAMBE, Teacher.

January 16, 1855.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Nenagh Union Workhouse Farm.

13. NENAGH WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Tipperary.

January 16, 1855.

Agricultural Instruction is imparted daily to about ninety pupils by the literary teacher. They show an aptitude and desire for this study, and on examination, answer with intelligence on the principles explained in the agricultural books, especially the practical details, such as preparatory and after culture of grain and green crops, with the periods of sowing and harvesting, the amount of seed per acre to be sown for each crop, and the distances to be left between the drills and between the plants. They seem sensible of the advantages arising from the following points of improved husbandry, viz.:—house-feeding stock, removing away useless fences, following a regular system of rotation in the cultivation of crops, and draining and subsoiling where necessary. They have become great enemies to the propagation of weeds, and to careless tillage generally.

The Model Farm is cultivated more upon the plan of a large garden than after the manner generally pursued on farms, in order to meet the great demand for vegetable consumption in the Workhouse, and because the remainder of the produce so cultivated can be readily disposed of in town at a fair price. The onions were not so good last year as they were the preceding year; neither did the carrots nor potatoes do well, the drought following the sowing of the carrots was injurious to them; but all the other crops yielded a fair produce.

Manure.—The ashes and turf-mould from the house, the straw of the beds, the cleansing of the stable, and the privies, afford abundant sources of manure, which, according as it is collected, is put together in one large heap, and turned over in September, and again in January. The liquid manure of the house is, in winter, poured over this heap; but in summer, it is generally used in watering the crops after sunset.

Agricultural Improvement.—The farmers about Nenagh are generally skilful and industrious; and, as far as the social and other conditions in which they are placed permit, they fairly carry out the improved system of tillage.

PATRICK CRANLEY, Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Nenagh Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year, ...	54	6	8
" Paid for Labour, ...	—		
" Free Labour of Pupils, &c., ...	—		
" Paid for Farm Seeds, . . .	7	11	9
" " Manures, ...	—		
" " Cattle, ...	—		
" " Feeding Stuffs, . . .	—		
" " Implements and Repairs, . .	—		
" " One year's Rent of Farm, .	27	10	0
" " " Poor Rate, .			
" " " County Cess, .			
To Profit and Loss for balance, being gain on the year, .	110	9	10¼
	£199	18	3¼

Cr.	£	s.	d.
By amount received for Grain, ...	—		
" " Roots, &c., . . .	22	11	4
" " Cattle Sold, . . .	—		
" " Dairy Produce, . . .	—		
" " Eggs and Poultry, . .	—		
Cost of Vegetables consumed in house, . . .	77	6	6¼
Vegetables, &c., consumed by horse, . . .	9	2	6
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements, ...	90	17	11
	£199	18	3¼

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Nenagh Union Workhouse Farm.

TABLE showing the CROPPING of the Nenagh Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes, ...	0 1 10	March, . . .	24th October,	7 barrels of 24 stones each,	20 barrels of 24 stones each,	—	—	—	The potatoes failed.
Turnips, Swedes, .	1 0 0	10th May, . .	November, . .	3 lbs., . .	25 tons.	—	—	—	
Turnips, Aberdeens, .	0 1 0	2nd June, . .	November, . .	3 lbs., . .	20 tons.	—	—	—	
Cabbages, ...	3 0 0	February, . .	June, . . .	—	—	—	—	—	Cabbages cut at different periods, both for consumption in the house and for sale.
Onions, ...	0 2 0	10th March, . .	October, . .	6 lbs., . .	2 tons.	—	—	—	
Parsnips, ...	0 2 0	16th March, . .	November, . .	6 lbs., . .	6 tons.	—	—	—	
Carrots, ...	0 1 0	18th March, . .	November, . .	6 lbs., . .	2 tons, . .	—	—	—	The carrots missed, but a crop of cabbage was taken instead.
Mangels, ...	0 0 20	20th April, . .	November, . .	5 lbs., . .	8 tons.	—	—	—	
Leeks, ...	0 0 25	25th April, . .	—	3 lbs.	—	—	—	—	
Celery, ...	0 0 15	28th April, . .	October, Nov., &c.,	¼ lb., . .	351 heads.	—	—	—	
GRASS.									
Vetches and Italian Rye-grass, ...	0 1 10	February, . .	June, Aug., and Oct.,	13 stones and 9 stones.	—	—	—	—	Two crops of vetches and rye-grass, used as soiling for the horse—mowed in small quantities as required.
Total, . . .	6 2 0								
"STOLEN CROPS."									
Cabbages, ...	4 1 20	At different periods,	At different periods,	—	—	—	—	—	Some of these cabbages still growing; the rest cut at different periods—partly consumed in the house and partly sold.

(Signed), PATRICK CRANLEY, Agriculturist.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

17th January, 1855.

J. HOUSTON SHEEHAN, Manager.

Enniscorthy Union Workhouse Farm.

14. ENNISCORTHY WORKHOUSE AGRICULTURAL SCHOOL, County Wexford.

January 8, 1855.

Agricultural Instruction.—A class of twenty-five boys regularly receive theoretic instruction in agriculture in the school, and fifty are afforded the advantage of practical training on the farm at present.

The Agricultural Sub-Inspector, at his recent visit (25th November), expressed himself well satisfied with their progress and proficiency in this department.

Farm Cultivation.—I beg to remark that the green crops, in general, were not as heavy as those of previous years. The land on which the turnips grew was occupied with cabbage plants up to the middle of June, which accounts for the light produce of this crop.

The parsnip crop was a failure, having been attacked with a small white grub which cut them off under the surface, and the damage being discovered in June the land was then cropped with cabbage.

The soil was a strong clay; and the manure applied was that from the Workhouse, mixed with old straw-beds and rich earth, &c., &c., which was the description of manure applied to all the green crops on the farm.

The onions were also a bad crop, owing to the dry spring. There was one rood sown with kohl rabi which was a complete failure by "finger and toes." Swede turnips being sown in the same land in 1852 is the only cause by which I can account for such a total failure, as one plant out of the entire rood did not escape. The disease made its appearance the 1st of July, and in three weeks after, all hopes of having a crop disappeared, I had them removed and the land cropped with cabbage. I had been very successful with this crop the two previous years, taking each year the first prize of the Royal Dublin Society; and the mode of cultivation this year was the same with the exception that turnips were grown in 1852 on the same soil, though mangel intervened in 1853; it goes in a great measure to prove that they, as well as turnips, should not be grown on the same land at intervals less than four or five years.

The potatoes, though blight made its appearance in the middle of July, were a fair crop; the tubers did not afterwards continue to blacken as was the case in previous years.

I changed the distance of the mangel plants this season from fifteen inches to twelve, and with advantage, as I had some drills grown at the former distance beside the latter, and when an equal quantity of drills were trimmed and weighed, the latter had the advantage. Our success on the alternate system with carrots and mangel was not as marked this year as in previous years. The carrots being slow in growth in the early part of the season, until shaded by the large spreading mangel leaf, turned out a light crop. I intend in future to sow the carrots in every second drill the first week in April, and the mangel first May, as I find the latter do best when sown at that time. By such a change the carrots will have one month advantage over the mangel.

The manure being previously dug into the mangel drills they will not be formed until the time of sowing, in order to have them fresh.

In speaking of the alternate system I may observe that I have been very successful with nonpareil, York, and flat Dutch cabbage, grown in alternate rows, the manure being previously dug into the land in February, leaving about five inches of soil over it. The nonpareil was planted the first week in March, in lines of three and a-half feet apart; and the first week in April the flat Dutch was planted in the middle of the former lines; thus giving one month's growth in advance

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Enniscorthy Union Workhouse Farm.

of the latter. The former was white and cut away the first week in June, before the latter required space, which space would be required had I not planted the nonpareil. The greatest attention is paid to keep up a succession of cabbage, by which the market of this town is well supplied; and the inhabitants thereof freely acknowledge the accommodation this farm affords them, as I may say all the produce is disposed of there.

It may be seen by the table of cropping that we had no flax this season, but in its place and for its preparation we had wheat; having no land for it but after a green crop which I found, from experience, not successful.—(See last Report).

There were five Irish acres planted under wheat the first week in March, two varieties—white splugen, and white chaff red; the former had a decided advantage over the latter. For the guidance of the Guardians and visitors, as well as the instruction of the boys, I had part sown in drills and part broadcast; the drills were much better. At the time of sowing, seven cwt. of salt was applied per Irish acre, with a good result, as part got none; and at the first appearance of growth it looked much better, but when it came to the sickle it was easily known where the salt was applied, by the hardness of the straw, which in a great measure accounts for its not falling, though very luxuriant, the land being after growing successive green crops. The white splugen was seriously attacked with red rust the last week in July; were it not for that, it was the opinion of the Agricultural Committee that we would have twenty barrels per Irish acre; fourteen was the produce; and was sold at thirty-three shillings per barrel, twelve shillings less than what could be obtained had we kept it one month longer; this was a large loss on the balance sheet. Three and a-half Irish acres of barley were sown the last week in March, in drills, at the rate of fourteen stones per Irish acre. The produce of this crop far exceeded our most sanguine expectations; it being twenty-three barrels per Irish acre, and was also sold four shillings per barrel less than what could be afterwards obtained. The barley land is sown down with perennial and Italian rye-grass alone; one and a-half acre of the former, and two acres of the latter, with the object of introducing a better variety of grasses into the surrounding neighbourhood. This is the first attempt in carrying out the rotation mentioned in my last Report, as after this year the flax will take its place after the grasses.

The mangel seed, as usual, was successful, and the products of previous years highly approved of by large growers who have sown it. So much for the careful selection of good bulbs, on which success altogether depends.

This year we made the first trial on the growth of turnip seed. The one-eighth of an Irish acre was planted with *Skirving's purple top Swede*, from which we had five bushels of seed, and for which we are offered £2 10*s*. per bushel; such produce and price would render the acreable value of this crop so high as £100. Taking into account the very dry season, and the difficulty of working such a large farm with weak help, our efforts, on the whole, have been most pleasing to the Guardians, who afford me all the necessary accommodation required. They also feel pleased in being visited by your Sub-Inspector, M. Brogan, Esq., and having the benefit of his suggestions from time to time, and his reports for the last year were most satisfactory to them, while to be prepared for his examination, the little boys who constitute the agricultural class are anxious, as well as myself, to acquire all the knowledge that their young minds are capable of comprehending. These boys are more and more anxiously sought after every season by the gentlemen and farmers

II. Appendix to Dr. Kirkpatrick's Report.

Enniscorthy Union Workhouse Farm.

who see them perform their work with skill and activity. As usual, Mr. Murphy, our literary teacher has co-operated with me in their instruction. Every year the farm is looked upon by the rate-payers, as well as the Guardians, as a most beneficial concern, seeing the different systems carried out successfully here they put them into operation on their own farms where circumstances admit; and further, I have had applications from most respectable young men to take them as agricultural apprentices, but the Poor Law Commissioners would not allow such a course. Our profits this year would be £100 more, but in taking stock, on the 31st December, 1853, it may be seen that £300 credit was taken for roots, the greater part of which remained on hands until late in the spring, and was afterwards sold by auction at a loss of not less than £100.

I again beg to return my sincere thanks for the kind mark of approbation which I have received from your Board in acknowledgment of my humble services.

ROBERT HAWKINS, Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Enniscorthy Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	406	1	11
,, Paid for Labour,	1	9	6
,, Free Labour of Pupils,	—		
,, Paid for Farm Seeds,	24	12	3
,, ,, Manures,	7	8	1½
,, ,, Cattle,	—		
,, ,, Feeding Stuffs,	5	19	3
,, ,, Implements and Repairs,	10	18	10½
,, ,, One year's Rent of Farm, ,, ,, ,, Poor Rate, ,, ,, ,, County Cess,	106	0	7
To Profit and Loss for balance, being gain on the year,	181	0	5
	£743	10	11

Cr.	£	s.	d.
By amount received for Grain,	206	4	4½
,, ,, Roots, &c.,	198	16	10½
,, ,, Cattle Sold,	—		
,, ,, Dairy Produce,	—		
,, ,, Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	338	9	8
	£743	10	11

APPENDIX I.

II. Appendix to Dr. Kirkpatrick'sReport.

Enniscorthy Union Workhouse Farm.

TABLE showing the CROPPING of the Enniscorthy Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Mangels,	9 2 0	April,	November,	6 lbs.,	20 tons,	3 10 5	13 19 7	—	
Turnips,	2 0 0	June,	December,	4 lbs.,	18 tons,	3 3 9	11 1 3	—	
Carrots,	1 0 0	April,	December,	6 lbs.,	12 tons,	3 10 5	17 1 4	—	
Onions,	0 2 0	March,	September,	10 lbs.,	3 tons,	4 10 5	19 9 7	—	
Cabbage,	3 0 0	Successionally,	September,	1 lb.	40 tons,	3 3 5	16 11 7	—	
Potatoes,	0 1 0	March,	October,	100 stones,	7 tons,	7 0 5	20 19 7	—	
Sugar Beet,	0 1 0	April,	November,	6 lbs.,	18 tons,	3 10 5	13 19 7	—	
Kohl Rabi,	0 1 0	March,	November,	4 lbs.,	18 tons,	3 15 5	—	0 8 0	See Report.
Parsnips,	0 2 0	March,	November,	6 lbs.,	18 tons,	3 12 6	—	0 10 6	See Report.
GRAIN.									
Wheat,	8 0 0	1st March,	August,	10 stones,	8½ barrels,	4 10 5	13 17 1	—	
Barley,	5 0 0	March,	August,	10 stones,	18 barrels,	3 15 5	10 3 7	—	
Mangel seed,	1 0 0	February,	October,	12 tons bulbs,	1 ton,	12 5 5	43 14 7	—	
Turnip seed,	0 1 0	February,	July,	12 tons bulbs,	40 bushels,	9 5 5	90 14 7	—	
Under Quicks, &c.,	0 1 0	—	—	—	—	—	—	—	
Grasses,	1 1 0	—	—	—	—	—	—	—	
Total,	33 0 0								
"STOLEN CROPS."									
Cabbage,	1 0 0	—	—	—	—	—	—	—	

(Signed), ROBERT HAWKINS, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

8th January 1855.

JOHN KENNEDY, Manager.

15. ANTRIM WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, Co. Antrim.

II. Appendix to Dr. Kirkpatrick's Report.

Antrim Union Workhouse Farm.

Agricultural Instruction.—The agricultural class in the school at present consists of nineteen boys, who receive instruction for half-an-hour each day, chiefly from the agricultural books published by the Board of National Education. As the demand for the services of boys capable of performing farm work, has been very considerable for some time past, few of that description are now in the workhouse; any of those remaining, and able to handle the spade, are generally kept at work on the farm, all the operations on which they are made to understand. The smaller lads are also employed on the farm at such work as is suitable to their strength and capacity; such as hoeing, scuffling, and cleaning walks, picking up stones, weeding, and (in the season) thinning turnips and mangel, and, by means of these, the greater part of our green crops have been cultivated. All the boys are employed at out-door work about four hours daily.

The farm consists of 18A. 2R., statute, cultivated on a four-course rotation of cropping.

The annexed statement of accounts will show the receipts and disbursements for the year ended 31st December last; and, while a reasonable amount of profit (which, in my opinion, is but of secondary moment) is shown, far more important results affecting a class who, at no distant day, will form the bone and sinew of the community, have been secured, as well as an effectual test of destitution maintained in the Union.

WILLIAM STEEN, Master of Workhouse and Agriculturist.

Appendix I.

II. Appendix to Dr. Kirkpatrick'sReport.

Antrim Union Workhouse Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To value of Stock on hands at commencement of year,	50	0	0	By Grain Sold,	45	0	0
,, Rent and Taxes,	47	10	0	,, Clover sold,	6	13	3
,, Paid for Lime,	1	4	0	,, Mangel sold,	5	0	0
,, Implements, Farm and Garden Seeds,	10	0	0	,, Turnips and Mangel on hands,	15	0	0
,, Feeding Stuffs,	14	1	3	,, Dairy Produce used in house,	65	0	0
,, One Cow,	11	17	6	,, Vegetables and Potatoes used in house,	16	0	0
,, Two Pigs,	3	4	6	,, One Cow sold,	11	10	0
,, Balance, Profit,	82	6	0	,, Value of Stock on hands at close of year,	56	0	0
	£220	3	3		£220	3	3

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II. Appendix to Dr. Kirkpatrick's Report.

Antrim Union Workhouse Farm.

TABLE showing the CROPPING of the Antrim Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.								
Mangels,	0 2 0	1st April,	1st November,	6 lbs.,	35 tons.	Owing to existing circumstances accurate information cannot be afforded under this head.	—	—	
Turnips,	0 2 0	12th May,	November,	5 lbs.,	26 tons.		—	—	
Cabbage,	0 2 0	Various times,	Various times,	4,500,	36 tons.		—	—	
Potatoes,	0 1 0	March,	August & September,	11 cwt.,	4 tons.		—	—	Potatoes good; and used before being much injured by the blight.
GRAIN.									
Oats,	5 2 0	March,	September,	1½ cwt.,	Not known as crop was sold by auction, one half at £9 17s. 6d., and the rest at £8 per statute acre.		—	—	
GRASS.									
Rye-grass,	5 2 0	March,	June,	1½ bushels,	2½ tons.		—	—	
Grazing,	3 0 0	—	—	—	—		—	—	
Meadow,	2 3 0	—	—	—	—		—	—	
Total,	18 2 0								

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief,

(Signed), WM. STEEN, Master.

II. Appendix to Dr. Kirkpatrick's Report.

Athy Union Workhouse Farm.

16. ATHY WORKHOUSE AGRICULTURAL SCHOOL, County Kildare.

Agricultural Instruction.—I entered on the duties of agriculturist here in August, 1853, and, immediately after my appointment, I brought under the notice of the Board of Guardians the advantages that would result from placing the agricultural department under the supervision of the Commissioners of National Education. The Board, acting on this suggestion, took the necessary steps to insure its connexion; and, on their application, the Agricultural Inspector visited and reported, and a free stock of agricultural books was supplied for the instruction of the boys. I am happy to be enabled to state that very gratifying results have already followed from the adoption of this course.

Agricultural Class.—This consists of sixty of the more advanced boys in the school, aged from nine to fifteen years, who, by their proficiency, may be fit for a place in the class. Agricultural instruction is imparted for an hour each evening, five till six, on the various subjects comprehended under a liberal course of agricultural education. They read from the Agricultural Class Book, Hodges' Chemistry, and Johnston's Catechism, and are frequently instructed from lectures prepared by myself, each lecture being succeeded by an examination. The progress of the pupils in these matters is most satisfactory, and visitors have frequently expressed their satisfaction with the proficiency displayed by this class in agricultural principles.

I fully concur in the opinions of my fellow-agriculturists, regarding the agricultural instruction of pauper children, being fully sensible of the difficulties that are experienced ere success can be attained, and that it is only by entering on the duty with zeal and energy that satisfactory results can be hoped for. The obstacles that operate most seriously against this department are—first, the uneducated state in which the boys enter the workhouse, this ignorance being frequently united with vicious habits; second, the habitual fluctuations in the attendance of the class. When a boy enters, there is no guarantee for his continuance in the house, and, perhaps, he demands his discharge at the very moment when any symptoms of improvement become visible; then, by mingling again with his former companions, forgets what he learned, and returns again as lamentably ignorant as at first. It is evident that the parents of these children allow them to grow up in idle or mischievous pursuits, that little attention is paid to their education, and that when they enter here in this neglected state it is hard to expect any immediate improvement. Notwithstanding these drawbacks, a great deal can still be done to remedy the condition of these unfortunate pauper boys, by means of a good system of industrial training.

In this workhouse, all the boys from the age of seven years, and upwards, are receiving the advantages of such training, being employed either in learning trades, or at agricultural labour; and I invariably find that those who work on the land are less refractory, and benefit more largely from every branch of instruction. The industrial class takes part in every operation of the farm, and it is really gratifying to witness the cheerfulness and dexterity with which they perform their work. This class is divided into two sections, who work on alternate days; so that practical instruction in the field, and literary teaching in the school, go on hand-in-hand. The members of this class are frequently employed as farm servants; during the last six months, no less than thirty of them obtained employment as such, and I feel happy in being enabled to state that, in the generality of cases, they have given satisfaction to their employers. I have no doubt but we will in a short time add very materially to the number of educated labourers in this locality, and,

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Athy Union Workhouse Farm.

thereby, supply a want which is being seriously felt, in consequence of the diminution of this class by emigration, &c.

Workhouse School Farm.—The extent of the farm is 34A. 0R. 14P., statute measure, and consists of two separate portions of land. The original farm, immediately adjoining the house, contains 17A. 3R. 23P., and the additional 16A. 0R. 31P., having been rented by the Board of Guardians, about five years ago, to afford employment to the large number of able-bodied paupers then in the house. The latter portion is detached from the house; and now that the number of hands available for labour has decreased so considerably, I understand that it is to be given up, and all the labour concentrated on the farm immediately connected with the establishment. The soil is a sandy loam, of very fair quality, resting on a calcareous subsoil. It is loose and friable, and of a depth sufficient to admit of all the improved implements of husbandry being used in its cultivation. The crops grown on it are quick in coming to maturity, and, with moderate manuring, very fair returns may be obtained. Heretofore no regular system of *rotation* was observed in the cropping of the land, precedence being always given to that crop which entailed the least expense, and suited best the purchasers of the locality, regardless of regularity or system. The injurious consequences of this course are now about being obviated by the adoption of regular rotations, suited both to the soil and to our circumstances. On one portion of the farm a three-course shift is to be followed, where the division in grass can be very advantageously irrigated with the liquid manure from the cess-pool; and, by this means, the superabundance of this valuable liquid can be converted to profitable use. On the portion enclosed inside the walls, a six-course green crop rotation is to be followed, by which we will be enabled to raise a large amount of vegetables for the use of the house, the surplus finding a ready sale in the market. I trust, in course of time, to procure some fruit trees, which may be trained along the walls, which will add to the instruction of the boys, as well as considerably increase the profits of the industrial department.

I beg to submit the following observations on the crops cultivated:—

Mangels.—I would be anxious to direct special attention to this crop, particularly, as a portion of the ground occupied by it was heretofore a common marsh, producing only weeds and aquatic plants; but now, when properly drained and reclaimed, it has returned a produce of forty tons per statute acre, which, being sold at 14*s.* per ton, amounts to £28, or £45 8*s.*, per Irish acre. The cleanness and uniformity of this crop attracted a great deal of attention during the different stages of its growth, and affords a strong illustration of what judicious reclamation is able to effect. The seed was dibbled in at distances of fourteen inches, and whenever a blank appeared, it was immediately filled up, by lifting with a trowel a few of the seedlings from an adjacent clump, and placing them cautiously in a prepared receptacle in the vacant space, carefully pressing the clay gently around their delicate roots. By this plan, the growth of the transplanted root was not in the least retarded, and it is surprising the area of ground that an active man can get through in a day; and the success of the operation, when carefully performed, should recommend its general adoption.

Turnips.—At the period of sowing the turnip crop the weather was unusually warm; and the soil being rather sandy, I dreaded the ravages of the fly very much; so, in order to escape the usually fatal consequences of its attack, I mixed the Swede with the seed of the yellow globe, or Dales-hybrid; as the latter first appeared above ground, the fly preyed upon them, and in the process of thinning none but the

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Swede were allowed to remain. I found this to turn out a very successful experiment. The after-culture of this crop, as well as of the mangels, was carefully attended to, by regular hoeing, digging, weeding, &c., &c.

Flax.—The area of ground allotted this crop was exactly one rood, and it was tried more as an experiment than for gain; though there is no question but flax should, unless under peculiar circumstances, be grown on every workhouse farm, in order to afford the paupers plenty of industrial employment, and relieve the Union of the enormous expense that attends the purchase of clothing materials. I am sorry to state that we must be obliged to discontinue its growth on this farm, on account of the unsuitability of the soil, and there being no storage for it on the premises.

Live Stock.—I regret to have to remark that there has been no live stock kept on this farm, nor does there seem any probability of immediately remedying this deficiency, though the keeping of live stock on these farms would effect a considerable saving for the Union, by economizing portions of farm produce which must otherwise go to waste, or be disposed of for a trifle. I have seen the keeping of cattle work very favourably in other unions, and in none do I believe could the practice be better carried out than in this establishment. I have on several occasions, represented the matter to the Board of Guardians, and showed them the expediency of such a course, and how it directly serves to make the industrial training of the boys more effectual; but as yet my representations have been ineffectual.

The management of the agricultural department during the past year was very successful, and not only fully realised the expectations of the Board of Guardians, but also met with the approbation of the agricultural Sub-Inspector, who left the following record of his visit:—

> Having inspected the workhouse farm, and examined a class of twenty-two boys in the science of agriculture, I am happy to be enabled to state that there has been a very fair amount of progress since my former visit, and such as will justify me in recommending the agriculturist for a gratuity.
>
> I am glad to find that the suggestions left at my previous visit, relative to the systematic cropping of the land, have been attended to, by the adoption of two different rotations, of which I entirely approve.

I also beg to append the following observations of visitors who inspected and inquired into the working of the agricultural department during the year:—

> We have visited the workhouse farm to-day, and heard a class examined in agriculture, and were very much struck with the intimate knowledge of the principles of agriculture displayed by this class, as examined by the agricultural teacher.
>
> JAMES WALKER, Larne.
> July 18, 1854. GEORGE BIRCH, Comber.

> I have seen the workhouse farm, and examined its crops. I also heard the boys examined, and their proficiency in agriculture is very great.
>
> CHARLES FOGH,
> August 20, 1854. Copenhagen, Denmark.

Manures.—Every opportunity calculated to promote the collection of this indispensable auxiliary has been carefully observed. The dung-heap is regularly formed of alternate layers of bog-mould, decomposed straw, vegetable refuse, and the like, and regularly watered with the liquid of the cess-pool every morning, and immediately covering it with prepared bog-mould. The privy contents are kept in a separate receptacle, mixed with pulverized earth or turf-mould, and, when properly

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prepared, is formed into a heap by itself, until required for use. We have been enabled to accumulate a vast deal of manure on these premises, and, consequently, we are always in a position to manure our green crops very liberally, to which may be attributed the good returns realised last season.

Permanent Improvements.—These consisted of the thorough drainage of one acre of land, and the trenching of three roods in the garden, where it formed the preparatory tillage for carrots and parsnips. The drains were cut four feet deep by eighteen feet apart, discharging into an adjacent sewer, which answered as a main drain. The parallel drains were filled with broken stones to a depth of fourteen inches, and properly covered with a scraw. The work was well and carefully executed, and I have every reason to rest satisfied with its permanence.

Progress of Agricultural Improvement, &c.—I am happy in being enabled to state that the advancement in this way is very striking; and, judging from its steady movement for the last few years, we may reasonably look forward for its still further development. Evidences of improvements are every day becoming visible, and these gratifying movements are principally owing to the warm interest taken by his Grace the Duke of Leinster, in promoting the welfare of his tenantry, and the corresponding desire on their part to keep pace with the progress of agricultural improvement. I would also remark, that to the example set forth in the district model farm of the National Board, is to be attributed some of the merit for the change which has taken place. The cultivation of green crops, the drainage and reclamation of waste land, and many other useful lessons have been afforded by the efficient working of the above-named institution. The extent to which the example set forth on this workhouse farm has influenced the progress of improved husbandry, would be difficult to ascertain; but that it has exhibited a judicious course of cultivation, and crops cultivated with care and disposed of with profit, is undeniable; and from the joint co-operation of both, in disseminating knowledge of the principles of improved husbandry, I think they cannot fail in establishing what is useful, and exhibiting what is essential towards the success of agricultural improvements in this locality.

I cannot bring this report to a close without acknowledging the assistance which I have invariably received from Mr. M'Meekin, the Agriculturist of the Athy District Model School; and the co-operation which has been afforded by B. L. Lefroy, Esq., J.P., Chairman of the Board, and J. B. Pilsworth, Esq., Manager, to whom I beg to return my best thanks for their kindness in frequently visiting the farm, and their zeal in promoting the useful objects for which it was originally established.

P. O'BRIEN, Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Athy Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	44	13	10
,, Paid for Labour, including a proportion of Agriculturist's Salary,	28	6	9½
,, Free Labour of Pupils,	—		
,, Paid for Farm Seeds,	20	12	0
,, ,, Manures,	3	14	2½
,, ,, Cattle,	—		
,, ,, Feeding Stuffs,	—		
,, ,, Implements and Repairs,	0	19	8
,, ,, One year's Rent of Farm, }	59	7	10
,, ,, ,, Poor Rate, }			
,, ,, ,, County Cess,	—		
To Profit and Loss for balance, being gain on the year,	157	12	7½
	£315	6	11½

Cr.	£	s.	d.
By amount received for Grain,	118	16	2
,, ,, Roots, &c.,	114	1	10½
,, ,, Cattle Sold,	—		
,, ,, Dairy Produce,	—		
,, ,, Eggs and Poultry,	—		
,, Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	82	8	11
	£315	6	11½

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Athy Union Workhouse Farm.

TABLE showing the CROPPING of the Athy Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Turnips, ...	4 0 7	May and June, .	November, . .	4 lbs., . .	28 tons, . .	2 3 6	5 0 6	—	
Mangels, . . .	2 1 29	8th May, . .	November, . .	5 lbs., . .	40 tons, . .	2 4 1	15 12 6	—	An excellent crop.
Carrots, ...	0 3 10	March and April, .	November, . .	7 lbs., . .	24 tons, . .	4 16 9	11 8 3	—	
Parsnips, . . .	0 1 25	March, . . .	November, . .	7 lbs., . .	10 tons, . .	0 11 5	2 13 4	—	
Potatoes, . . .	0 3 10	March, . . .	September, . .	11 cwt., . .	149 cwt., .	1 15 8	9 7 3	—	
Cabbages, . . .	0 3 10	April and August, .	July and November,	5,400 plants, .	Not ascertained,	1 4 8	4 18 8	—	
Onions, ...	0 1 25	March, . . .	September, . .	14 lbs., . .	Not ascertained,	2 0 4	4 18 8	—	
GRAIN.									
Barley, ...	13 3 2	April, . . .	August, . . .	1 barrel, . .	Not ascertained,	3 5 5	2 16 6	—	
Oats, ...	7 1 6	March, . . .	August, . . .	12 stones, .	Not ascertained,	2 14 6	2 0 11	—	
Flax, ...	0 1 25	20th April, . .	August, . . .	4 bushels, .	Not ascertained,	2 17 6	2 1 2	—	
GRASS.									
Natural meadow, . .	2 3 25	—	August, . . .	—	Not ascertained,	1 17 7	0 18 3	—	
Total, . .	34 0 14								
"STOLEN CROPS."									
Cabbages, . . .	1 0 0	June and August, .	Winter, . . .	—	—	1 4 8	3 14 0	—	

(Signed), PATRICK O'BRIEN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

20th January, 18

J. D. PILSWORTH, Manager.

Bantry Union Workhouse Farm.

17. BANTRY UNION WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Cork.

January 11, 1855.

I. *Agricultural Instruction.—Agricultural Class.*—This class consists of twenty-three of the most advanced boys of the second, third, and fourth classes, who receive theoretic instruction for half an hour each morning; and it affords me great pleasure to have it in my power to inform you that their proficiency is most satisfactory.

Industrial Class.—About forty, whose ages vary from nine to fourteen years, work on the farm every day that is dry for three hours, and are thereby acquiring a valuable amount of practical knowledge of agriculture.

II. *Model Farm.*—Our farm contains 3A. 1R., statute measure, and is cultivated on a six-course rotation, as follows:—

1. *Potatoes.*—This crop was planted in March, in beds, on which a compost of night-soil, straw, &c., was deposited. The potatoes came up and grew admirably, and would have yielded a large return had not a very severe blight ensued.

2. *Cabbages.*—Planted in February and March, in drills, part of which proved very satisfactory.

3. *Onions.*—This plot was remarkably well prepared in March and April, laid out in beds highly manured, and the instructions detailed in "The Farmers and Cottagers' Guide" strictly followed. I regret, however, to state, that in consequence of the failure of the seeds, viz., "Strasbourg, Deptford, and James' Keeping," arising either from their bad quality or the great drought, I was compelled to have recourse to a second sowing.

4. *Parsnips.*—After the due preparation of the ground, which was laid out in beds five feet wide, I commenced sowing in April, and ended in May. Although having taken the precaution of steeping part of the seed in soft water, and the other part in liquid manure, mixed with soft water, *each* for forty-eight hours, and subsequently very well dried with sand, I am sorry to say that I was under the necessity of having recourse to a second sowing, as in the case of the onions.

5. *Carrots* (2R.)—The ground being satisfactorily prepared for the sowing of this seed, after its being very well steeped for forty-eight hours in soft water, and subsequently dried with sand, and well hand-rubbed, I commenced sowing it in May, and through the continuation of the dry weather I was induced to put down a greater quantity than I otherwise would have done; but I found it unnecessary, for there was a rapid growth, without the least failure.

6. *Turnips* (1A.)—This ground being suitably prepared, and opened in drills twenty-seven inches apart, in June I commenced sowing Skirving's improved purple-topped Swede and purple-topped Aberdeen, with three-quarters of a pound of white globe. I found a great delay in their germination, although having applied nightsoil under and over a part of the seeds, still that part to which I applied the nightsoil proved very defective, from the ravages of the fly.

Manures.—There is a large pit, about thirty feet long, ten broad, and four deep, well lined with stone and clay inside, and also well floored, in which the rubbish, ashes, turf-mould, the old straw of the dormitories, the contents of the urinals, and the cleaning of the cesspools, are deposited. When well filled, its contents are taken up and made into a heap, well covered over and secured till required.

DANIEL O'SHEA, Teacher and Agriculturist.

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Bantry Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	29	2	11½
" Paid for Labour,	—		
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	6	15	0
" " Manures,	2	15	0
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	1	9	1
" " One year's Rent of Farm,	6	0	0
" " " Poor Rate,	—		
" " " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	51	3	5¾
	£97	5	6¼

Cr.	£	s.	d.
By amount received for Grain,	—		
" " Roots, &c.,	54	12	9¼
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
" Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	42	12	9
	£97	5	6¼

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Bantry Union Workhouse Farm.

TABLE showing the CROPPING of the Bantry Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes, ...	0 1 0	March, . . .	August, . .	52½ stones, .	224 stones, .	10 19 2¾	—	2 0 7¼	Severely blighted and rotten in the ground.
Cabbages, . . .	0 1 10	February and March,	From 25th June to present date,	13,056 plants, .	1,088 doz. heads,	11 1 9¾	0 8 4¼	—	Some of the plants of indifferent quality.
Onions, ...	0 2 20	March and April, .	October, . .	27 lbs., . .	3½ tons, . .	15 15 9	11 9 0¼	—	Great failure in seeds, which caused a second sowing.
Parsnips, . . .	0 2 10	April and May, .	December, . .	24 lbs., . .	14¾ tons, . .	10 16 10¼	5 14 10¾	—	Ditto.
Carrots, ...	0 2 0	May, . . .	November, . .	14 lbs., . .	$10\frac{11}{20}$ tons, .	10 13 11½	3 4 10	—	
Turnips, ...	1 0 0	June, . . .	December, . .	6¾ lbs., . .	$11\frac{6}{20}$ tons, .	10 11 7	—	1 1 6½	Injured severely by the ravages of the fly.
GRAIN.									
GRASS.									
Total, . . .	3 1 0								

(Signed), DANIEL O'SHEA, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

11th January, 1855. MAURICE HEALY, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Balrothery Union Workhouse Farm.

18. BALROTHERY WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Dublin.

March, 1855.

Agricultural Instruction.—There has been a considerable decrease in the number of boys in the house during the past year, so that few now remain capable of understanding this useful branch of education. There are at present only ten boys in the "Agricultural Class," being those who are reading the Sequel and Third Books.

The Industrial Class numbers about thirty, half of whom are engaged on the garden every evening after school-hours, from two to six, when the weather permits; and the remainder are occupied at their respective trades, viz., shoemaking, tailoring, and baking. I feel most happy in stating, that the boys receiving agricultural instruction, both theoretical and practical, evince an anxious desire to acquire a knowledge of this subject; but, owing to the limited number in the "Agricultural Class," and taking their age (only three out of the above number being above twelve years) and their irregular attendance, consequent on their frequent admissions and discharges to and from the house, into consideration, much cannot be expected from them. But on my part, during my stay in the establishment, I shall always feel it a very important duty to discharge, to give whatever assistance in my power to render them useful members of society, and improve their social and moral condition.

School Garden.—Owing to the advanced time of the season (April) when I received instructions from the Guardians to take a portion of the land around the house, for the purpose of training the school-boys to agricultural labour, I was only able to cultivate about one rood, as a kitchen garden, to raise vegetables for house consumption. The crops raised were parsnips, carrots, table turnips (W. Dutch and stone), leeks, onions, and cabbage-plants. The latter crop paid very well, though there were only a few perches under it. The greater portion of it was transplanted by the adults on a part of the land not in my charge, as I found employment for the pupils in thinning, weeding, &c. The plants put down were savoys, nonpareil, and borecole. These, when fit to be taken up, were used in making vegetable soup for the inmates, which effected a considerable saving to the Guardians, both in the purchase of plants and vegetables; besides a great deal were sold to the farmers in the neighbourhood, which paid trebly for the seed and cost of raising them. The remainder of the crop was of a medium quality, as the season was far advanced when we commenced work. The turnips partially failed, owing to the dryness of the season; the beds were re-sown with white stone, and succeeded as well as could be desired.

Manures.—The manure used for the farm and garden purposes is principally composed of privy stuff, old straw, and coal-ashes. These remain for some time decomposing; then soap-suds and other waste stuff from the laundry, &c., are conveyed to a tank just beside the manure heap, and are pumped over the whole heap, causing rapid decomposition. This manure has proved on the farm to be of the best description in raising root-crops of the most superior quality. These crops are generally sold by auction, and it is found that the farmers of the neighbourhood are most willing to become purchasers of them.

This being the first Report of our industrial operations, which are but yet in an infant state, it is not so satisfactory as I would wish; but I trust that the next I have the honour to forward will compensate for the meagre appearance of the details now furnished.

JOHN AUSLEY, Schoolmaster.

II. Appendix to Dr. Kirkpatrick's Report.

Bandon Union Workhouse Farm.

19. BANDON WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Cork.

January, 1855.

About thirty-six boys attend school daily, from ten till one o'clock, where they are instructed in the elementary branches usually taught in National Schools.

Agricultural Instruction.—About eighteen of the school-boys form the "Agricultural Class," and receive agricultural instruction from four to five o'clock each evening of the week, except Saturday, so that there is no infringement whatsoever on the regular school-hours. It is to be regretted that a larger number is not qualified to profit by studying agricultural subjects. The inability of those who cannot participate in this kind of instruction is attributable to the deplorable state of ignorance in which they are found at the period of their admission, coupled with the comparatively short time they remain.

The pupils appear sensible of the advantages of mental and industrial training, as is manifest from the desire exhibited on their part of acquiring a knowledge of the principles of agriculture, and the readiness with which they perform the various operations of the farm, in confirmation of which I subjoin an extract of Mr. Brogan's observations, recorded by him in the Report Book, on the occasion of his visit in July last:—"Examined seventeen boys in agriculture, and inspected the cultivation of the portion of land allocated for their industrial training. I have been much pleased by the amount of progress that has been effected since my previous visit, and which, indeed, far exceeded my expectations; and it affords me great pleasure to observe the cheerfulness with which the boys assist in the farm operations."

School Farm.—The portion of the workhouse farm which is under my care consists of four statute acres, divided into four nearly equal areas by walks cutting each other at right angles, the walks and that part occupied by the manure-pit not being included in the four acres.

The crops grown were potatoes, turnips, mangels, cabbages, flax, vetches, and barley. The ground was dug and manured, the drills formed, seeds covered, the crops kept clear of weeds, &c., and harvested by the boys. The value of the labour of the pupils was not estimated, from the difficulty of so doing. Our time from the 4th of March, the day on which operations commenced, until the latter end of April, was chiefly occupied in preparing the ground for green crops. The subsequent period was almost entirely devoted to the after-culture and harvesting of the different crops.

In consequence of the farm not being under a regular rotation last season, we had not a regular succession of crops. The four-course rotation is intended to be pursued in future.

I append the balance sheet of my farm account for the past year, together with the return of statistics and cropping.

PAUL WOODS, Schoolmaster and Agriculturist.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Bandon Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	*s.*	*d.*
To amount of Inventory and Valuation at commencement of year,	—		
" Paid for Labour,	—		
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	5	14	3
" " Manures,	6	0	0
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	1	8	8
" " One year's Rent of Farm,	8	12	9
" " " Poor Rate,	—		
" " " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	36	7	4
	£58	3	0

Cr.	£	*s.*	*d.*
By amount received for Grain,	4	6	0
" " Roots, &c.,	39	10	0
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	14	7	0
	£58	3	0

Appendix I.

II Appendix to Dr. Kirkpatrick's Report.

Bandon Union Workhouse Farm.

TABLE showing the CROPPING of the Bandon Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 2 25	March,	September,	8¾ cwt.,	2tns. 18cwt. 20lbs.	Labour gratuitous.	7 14 11	—	A thin crop, but very good.
Turnips,	1 0 0	May, June, and July,	December,	4 lbs.,	14 tons,		7 0 9	—	These were about an average crop.
Mangels,	0 1 0	April,	December,	6 lbs.,	19 tons,		4 4 7	—	A very good crop.
Flax,	0 2 0	April,	July,	8 bushels,	88 cwt. of straw,		8 1 9	—	One-third the seed did not grow.
Cabbages,	0 0 30	April and May,	Sept. and October,	11,520 plants,	Not known,		2 10 0	—	Some of the cabbages were excellent.
Vetches,	0 1 20	April,	Eaten by horse in July,	3 bushels,	Not known,		0 10 10	—	A bad crop, being choked by weeds which it was very hard to get rid of.
GRAIN.									
Barley,	1 0 5	April,	August,	12 stones,	Not known,		4 6 0	—	This crop lodged early in the season, which was the cause of its not filling properly.
GRASS.									
Total,	4 0 0								
"STOLEN CROPS."									
Cabbages,	0 2 25	September,	Still on the farm,	14,400 plants,	—		18 0 0	—	After potatoes.
Turnips,	0 1 20	August,	December,	4 lbs.,	10 tons,		1 2 0	—	After vetches.
Italian rye-grass,	0 2 0	April,	Still in ground,	2 bushels,	Still in ground,		0 6 0	—	These were a light crop, it being rather late when they were put in.
Total,	1 2 5								

(Signed), PAUL WOODS, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

6th January, 1855.

S. R. TRESILIAN, Clerk of Union.

Carrick-on-Shannon Union Workhouse Farm.

20. Carrick-on-Shannon Workhouse Agricultural National School, County Leitrim.

March 6, 1855.

As it was not till near the close of the year that the agricultural department was received into connexion, and as I was absent attending the course of literary training in Marlborough-street during the first half of the year, so that at my return the crops were mostly all sown, the after-culture only remaining to be attended to, I cannot furnish the necessary accounts and statistics of the agricultural department for the past year. I must therefore confine myself to the following topics:—

Agricultural Instruction is imparted to a class of twelve, the most intelligent pupils. An hour before breakfast, on five mornings in the week, is devoted to the study of the theory of agriculture, using the "Agricultural Class Book" and "Johnston's Catechism of Agricultural Chemistry and Geology" as text-books. In these books they read a lesson each morning, and I afterwards examine them on and offer any explanation that the subject requires, making it as interesting for them as possible.

The members of the agricultural class are employed four hours daily in the practical operations of the farm; and, as compensation and encouragement, extra rations are allowed, which is a great inducement to their being active and attentive at their work. In fine weather, when any suitable work is to be done, the smaller boys are brought out to assist for a few hours each evening.

Model Farm.—The farm, which contains about 8a. 2r., statute measure, is situated on a very elevated position; two-thirds of it has a northern, and the remaining a southern aspect. It consists of a heavy clay-soil, resting on a retentive substratum of the same, which, in wet weather, is very difficult to manage. A great portion of this soil consists of the stuff that had been removed from the interior of buildings, foundations, &c. It requires both chemical and mechanical improvements, as well as judicious management, to make it grow good crops. The extent under cultivation is 2a. 3r. 12½p., on which potatoes, turnips, cabbages, parsnips, onions, leeks, beans, flax, (the seed of which has been preserved), oats, and celery were grown last season. About another acre remains available for cultivation, but it requires some time to prepare it for the reception of a crop, part of it being a large accumulation of earth, forming a very unsightly hill in the centre of the farm, which is now being removed to the lower grounds as leisure permits.

Another field, of about two acres, was taken at some distance from the farm. It is not, however, land that can be profitably cultivated, as it contains a quarry, from which the stones used in building this Workhouse were obtained, and presents a very uneven surface. Under these circumstances, the expense of reclamation would be more than its cultivation afterwards would compensate for. It being good pasture land, I think it more judicious to let it remain undisturbed; and if, in course of some time, the Guardians purchase a few cows (as I have reason to hope they will), it would afford them sufficient pasture for a few hours daily, which would greatly enhance the value of the field, in addition to the advantage of affording a more extensive and useful course of training to the boys, from having stock on the farm.

Rotations.—Having to furnish as large a supply of vegetables as possible for the use of the inmates, I must of necessity follow a *rotation*, containing a large proportion of green crops, which I alternate wit

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Carrick-on-Shannon Union Workhouse Farm.

grain, taking care, at the same time, to instruct the pupils in the principles and details of the rotations usually followed by skilful farmers in the country.

In our case it would not answer to grow "grass for soiling," having no cows to consume it, nor could it be disposed of profitably; but "stolen crops" can be grown instead.

A portion of ground (about three roods) situated at one side of the *buildings*, has been divided by walks into plots, for the purpose of carrying out a course of garden rotation. This will be of the utmost advantage to the boys' training, as they will have an opportunity of seeing how to manage a garden properly.

Live Stock.—These consist of one pony, or jennet, for carting out manure, and three pigs. It is a matter of regret that so few *animals* are kept on our farm, but I expect that the Guardians will sanction the keeping of a few cows.

Permanent Improvement.—The operations under this head consisted in levelling and filling up pits, &c., in order to make the surface more uniform; trenching ground intended for parsnips; making new farm-roads, in consequence of some additional building; also new walks, and repairing old ones; forming grass borders in pleasure-grounds, and planting ground hedges.

Manures.—The management and preservation of the manure are duly attended to. All the drainage of the house leads into a large reservoir or tank, into which the straw that has been used as bedding is emptied, till it is saturated with this liquid, when it is taken up from the tank, and mixed with night-soil, coal-ashes, &c., which makes a tolerably rich manure.

General Remarks.—Having charge of the literary as well as agricultural departments of this institution since June, 1853, it affords me much gratification to state the steady progress that has been made in both these departments since the introduction of industrial training. It is gratifying to see the willingness, delight, and interest now evinced by the boys to engage in the farm work, as compared with their former negligence, listlessness, and total aversion to useful or active employment. Such a change from indolence to active exertion is worthy of notice, as showing the importance and practical utility of combining literary with agricultural industry; and I may add, that since it was effected here the boys have rapidly improved, both morally and physically. They are more tractable, and enjoy much better health, than heretofore.

The provision that is being made for the education and industrial training of pauper youths, under the auspices of the Poor Law authorities, ably seconded by the Board of National Education, must, no doubt, confer a vast benefit on society, as well as on those who, having the advantages of a liberal education afforded them, in combination with industrial training, cannot fail of being highly useful and successful in afterlife.

JAMES M'GIRL, Teacher and Agriculturist.

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21. CARRICKMACROSS WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Monaghan.

Carrickmacross Union Workhouse Farm.

31st December, 1854.

The Board of Guardians, aware of the great utility of imparting practical agricultural instruction to the rising generation, have allotted a portion of the Workhouse ground, consisting of one acre, to be cultivated by the school-boys, so as to afford them an opportunity of having the theory imbibed in school reduced to practice on the farm.

Carrickmacross Union Workhouse Farm.

I took charge of the school with the ground attached on the first of October last, and not having received the accounts, which may have been kept previous to my connexion, I have no data wherefrom to furnish the statistical returns.

Cropping.— The crops cultivated last season were, potatoes, cabbages, parsnips, carrots, onions, and leeks, all of which were fair average crops, save the carrots, and leeks, which were scarcely worth the expense of cultivation.

The number in the school ranges from thirty to forty, twenty-four of whom work on the farm. Twelve of the smartest and most intelligent of them constitute the "agricultural class," in which they receive instructions for half an hour each day.

In conclusion, I beg to remark that the assiduity with which the boys labour while on the farm is truly gratifying, and cannot fail to make them hereafter useful and industrious members of society.

JAMES O'BRIEN, Schoolmaster and Agriculturist.

Belmullet Union Workhouse Farm.

22. BELMULLET WORKHOUSE AGRICULTURAL SCHOOL, County Mayo.

January 3rd, 1855.

The Agricultural Class, in the early part of the year, consisted of from four to six boys; but from the increased demand for labour these boys were taken out to service by the farmers of the district, and in some cases to instruct the children of their employers. There is now but one boy that is fairly able to read the agricultural class books, and only two able to perform manual labour.

Farm Cultivation.—Immediately after getting the crops off the land in 1853, I went with all the boys able to work and dug up all the land as deeply as possible, thereby exposing it to the influence of the atmosphere during the winter. This I found to be equal to half manuring, and it varies from the system pursued in this locality, which is called "false setting," and consists in making furrows about three feet (and more in many parts,) asunder, and covering the undug land with the earth taken out of these furrows.

Early in the month of March I dug the land a second time, and as potatoes were to be our chief green crop, I made the ridges about three and a-half feet in breadth, these were then manured. In a portion of the land the sets were planted in the surface soil, and on the rest I dropped over the dung as an experiment. I found the latter plan to be the better, the seed being near the influence of the sun. Many told me that I made the ridges too small, but the land containing under water, I had the advantage of having the surface soil drier by the small ridge system. I knew the course I had adopted to be the best, and the result proved it so; for in no part of the neighbourhood was the return equal to that of mine, although there was a partial blight. As to the grain crop nothing particular marked its sowing: that portion of the land was let out under grass seeds.

Permanent Improvement.—There was but little done in this way, save forming the reservoir for the manure, by which improvement the liquid portion is preserved from escaping. The manure is made up of night-soil, straw, turf-mould, road-scrapings, and other rubbish, and preserved as carefully as possible.

In conclusion, I may observe that as the country is improving in prosperity, there will be, in a little time, no boys in this Workhouse able to do any labour, and consequently, I cannot say how soon our agricultural department may be discontinued.

REDMOND CARRICK, Schoolmaster and Agriculturist.

Appendix I.

II. Appendix to Dr. Kirkpatrick'sReport.

Belmullet Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	7	6	0
" Paid for Labour,	10	7	1½
" Free Labour of Pupils,	—		
" Paid for Farm Seeds	6	1	7
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	0	17	0
" " One year's Rent of Farm,	3	0	0
" " " Poor Rate,	—		
" " " County Cess,	0	3	8
To Profit and Loss for balance, being gain on the year,	8	7	6¼
	£36	2	11

Cr.

	£	s.	d.
By amount received for Grain,	6	0	0
" " Roots, &c.,	22	10	11
" " Cattle Sold,	5	0	0
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	2	12	0
	£36	2	11

APPENDIX I.

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Belmullet Union Workhouse Farm.

TABLE showing the CROPPING of the Belmullet Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.		£ s. d.	
Turnips and Cabbage,	0 1 0	1st May,	1st December,	4 lbs.,	8 tons,	1 0 7	Profit,	—	The first sowing of the seed failed.
Potatoes,	1 1 0	25th March to 1st April	20th October,	15 cwt.,	8 tons,	14 6 10½	Profit.	—	
GRAIN.									
Oats,	1 2 0	22nd April,	20th September,	2 cwt.,	18 cwt.,	3 8 3	Profit,	—	Broadcast. The Oats having being sold by auction, I cannot exactly say how much was the produce.
Total,	3 0 0								

(Signed), REDMOND CARRICK, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

3rd January, 1855. G. S. BOWERS, Manager.

23. CASTLETOWN WORKHOUSE NATIONAL AGRICULTURAL SCHOOL, County Cork.

January 12th, 1855.

Castletown Union Workhouse Farm.

Agricultural Instruction.—There are at present only twenty boys in this class, while at the corresponding period of the previous year the number was twenty-six; the decrease is owing to the number of inmates being less this year than the previous. They work on the farm four hours and a-half daily, when weather permits; and it is pleasing to see the diligence they display in the general performance of their work. They are also instructed half an hour daily in the theory of agriculture, using as text books the "Agricultural Class Book," and "Farmer's and Cottager's Guide." In future I intend instructing them two or three times a week in Johnston's Catechism.

Model Farm.—The portion of the workhouse farm appropriated for the training of the boys contains 2A. 2R. 29P. The rotation intended to be followed is a four-course green crop shift, as I consider the portion of land set apart for the industrial training of the boys too small for the introduction of grain crops. The pupils comprising this class are well initiated into the management of the following crops:—potatoes, turnips, cabbages, parsnips, carrots, onions, and leeks, which are grown on the portion of the farm allocated to the industrial training, and instruction of the children under my jurisdiction.

Manures.—The manure which is used on this farm is a composition of straw obtained from the useless beddings of the establishment, with the contents of the cesspools, which is made into a compost with some peat-mould. It remains in the manure pit until it becomes thoroughly decomposed, when it is taken out and made up into square or oblong heaps, carefully covered with mould, in order to prevent, as far as possible, the escape of its gases into the atmosphere. It is then applied, as required for the different crops, care being taken not to leave it on the surface exposed to the influence of the sun's rays, but to get it into the soil as quick as possible. A quantity of mineral manure, such as lime, and sea-sand, is applied to a portion of the farm of a boggy or peaty nature, in order to alter its qualities, and make it more easy for air to enter and moisture to filter through.

Permanent Improvement.—Two walks are being constructed on a portion of the farm, in order to effect a proper division of the land for the new system of management, which will give the plot thus divided a neat and tidy appearance.

Progress of Agricultural Improvement.—The farmers of this locality seem to take a deep interest in the manner in which the agricultural operations are carried out here, especially the rotation of crops. Several of them purchased our cabbage plants, particularly those which were obtained from seeds sown in the month of April, to plant as a stolen crop where early potatoes were, which previously was a rare occurrence in this locality.

A large quantity of food for cattle might be obtained by the introduction of stolen or intermediate crops, without injuriously interfering with the regular system of cropping, but not having any stock to consume the surplus cropping, which would thus be obtained, the plan has not been carried out except in the raising of cabbages, of which we manage to have a constant succession. However, I am determined from henceforward to have no portion if possible on this farm vacant, without introducing stolen crops when opportunity offers, as perhaps what cannot be consumed in this establishment may be purchased by the neighbouring farmers.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Castletown Union Workhouse Farm.

At my commencement here on the 1st of January, 1853, I had many difficulties to surmount. From the youthful age of the children, averaging (from ten to thirteen years,) who had not been previously accustomed to work with agricultural implements of any description, their only employment being breaking stones, and occasionally in summer and autumn weeding on the farm, it was very difficult to get the farm work performed.

But now a brighter prospect dawns over them : instead of spending their time in idleness, and prowling about the yards of this establishment acquiring habits of mischief, they have plenty of useful employment to exercise both the mind and body, and fit them for becoming useful members of society hereafter.

I cannot conclude this Report without bringing under your notice the deep interest which R. Hamilton, Esq., Poor Law Inspector of this Union takes in promoting the success of the agricultural department of this establishment.

JAMES H. LOWRY, Teacher and Agriculturist.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Castletown Union Workhouse Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of Year,	3	8	0
,, Paid for Labour,	0	3	6
,, Free Labour of Pupils,	—		
,, Paid for Farm Seeds,	2	6	3
,, ,, Manures, including lime and sand purchased,	3	3	0
,, ,, Cattle,	—		
,, ,, Feeding Stuffs,	—		
,, ,, Implements and Repairs,	6	0	11
,, ,, One Year's Rent of Farm,	2	17	10½
,, ,, ,, Poor Rate,	—		
,, ,, ,, County Cess,	—		
To Profit and Loss for balance, being gain on the year,	37	5	11½
	£55	5	6

Cr.	£	s.	d.
By amount received for Grain,	—		
,, ,, Roots, &c.,	41	10	7
,, ,, Cattle Sold,	—		
,, ,, Dairy Produce,	—		
,, ,, Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	13	14	11
	£55	5	6

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Castletown Union Workhouse Farm.

Table showing the Cropping of the Castletown Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.	
							Profit.	Loss.
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	Observations.
Green Fallow Crops.								
Potatoes,	0 3 7	March,	October,	12 cwt.,	6 tons,	6 2 0	2 15 0	—
Turnips,	1 0 27	15th June,	December,	5 lbs.,	15 tons,	3 6 0	13 11 0	—
Cabbages,	0 0 36	Successionally,	Successionally,	—	—	3 7 0	3 15 0	—
Carrots,	0 1 0	10th April,	October,	3 lbs.,	4 tons,	4 9 0	0 18 4	—
Parsnips,	0 0 16	March,	October,	5 lbs.,	—	4 9 0	0 8 10	—
Onions,	0 0 19	15th to 25th March,	September,	8½ lbs.,	3½ tons,	5 10 0	3 11 10	
Leeks,	0 0 4	25th March,	September,	5 lbs,	—	4 15 0	1 7 0	—
Grain.								
Grass.								
Total,	2 1 29							
"Stolen Crops."								
Cabbages of sorts,	—	—	—	—	—	—	2 16 0	--
Total,								

(Signed), James H. Lowry, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 12, 1855. J. W. Healy, Manager.

Coleraine Union Workhouse Farm.

24. COLERAINE WORKHOUSE AGRICULTURAL SCHOOL, County Londonderry.

January, 1855.

Agricultural Instruction.—The number of pupils receiving instruction in agriculture is very limited, as owing to the demand for farm-servants in this part of the country, the farmers take the boys out of this Workhouse as soon as they are able to perform any work. The agricultural class is formed of the boys in the second and third classes in the day-school; only two of these boys are able to read in the agricultural class books supplied by the Commissioners of National Education, but as Mr. Brogan, when lately inspecting the farm, suggested that all the boys receiving practical training on the farm should also receive theoretic instruction in the school, those of the working boys who may be unable to read, have since being required to attend the class, and listen to the instruction and explanations afforded. This is the reason that the class is formed partly of the *second class*. The information they have got is as yet principally of a practical nature. At present they get instructions on agriculture half an hour daily, during the time allotted for secular instruction, and the remainder of their time, when the weather permits, they are engaged in farming operations.

The system of cropping that I have adopted is a "three-course rotation," and this is the first year that any regular course of cropping has been carried out on this farm.

Manures.—Particular attention is paid to the management of the manure. The night-soil, ashes, bed straw, and other refuse from the establishment are the only manures used upon the farm, and the quantity that can be supplied from these sources is quite sufficient.

This Report is, I am aware, very meagre, but I hope, should I be spared, and occupy my present position for another year, that a more satisfactory account will be accurately furnished for the ensuing year's transactions.

ALEXANDER CRAIG,
Master of the Workhouse, and Agriculturist.

[SUMMARY, &c.

TABLE showing the CROPPING of the Coleraine Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes,	3 2 0	4th March,	19th August,	90 stones,	400 stones,	0 15 0	—	—	The potatoes used in the Workhouse, charged at 4*d.* per stone.
Onions,	1 2 0	17th March,	7th October,	6 lbs.,	300 stones,	None.	12 10 0	—	
Mangel,	0 3 0	26th April,	22nd December,	4 lbs.,	—	—	8 17 0	—	
Turnips,	0 2 0	17th May,	4th January,	4 lbs.,	—	—	7 16 0	—	
Cabbage,	0 2 0	From March to May,	—	—	—	—	10 0 0	—	
Leeks,	0 1 0	12th April,	In the ground,	6 lbs.,	—	—	4 0 0	—	
GRAIN.									
Oats,	3 2 0	22nd March,	20th September,	9 stones,	160 stones,	0 9 0	8 0 0	—	
GRASS.									
Grasses,	2 0 0	—	—	—	—	—	10 15 0	—	
Total,	12 2 0								

(Signed), JAMES BLAIR, Teacher.

16th January, 1855.

II. Appendix to Dr. Kirkpatrick's Report.

Corrofin Union Workhouse Farm.

25. CORROFIN WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Clare.

January 3rd, 1855.

Model Farm.—The farm contains an area of six statute acres, and is divided into two sub-divisions: the smaller inclosed by a wall ten feet high, in which we grow the vegetables required for the use of the inmates; while the outer and larger portion enjoys a gently sloping declivity towards the south, and is admirably adapted for pursuing a more extensive system of improved husbandry. The land has been laid out with great care; the soil deeply dug during the autumn and winter seasons, to expose it to the influences of the atmosphere; and the crops exceeded in produce any grown in this Union. "Stolen crops," to a limited extent (because of the want of stock to consume them), have been grown on the farm during the past year, among which I may mention one of turnips, that produced thirty-five tons per statute acre.

Agricultural Instruction.—The "Agricultural Class," which is composed of the advanced pupils of the school, contains twenty boys, who devote one hour daily to the theory, and three to the practice of agriculture; and the progress made by the pupils of this class, in their literary as well as agricultural studies, has given general satisfaction. This institution having been drained of all its "able-bodied" inmates by the farmers of the surrounding districts, the cultivation of the farm has devolved on the boys, all of whom cheerfully assist in the several operations on the farm. Among the many benefits derived from training them up to habits of industry, not the least important is the influence it exercises on their physical condition. All wear a healthy aspect; and I feel confident that the sound and well-directed education they are receiving here will soon become manifest when called upon to supply the place of those borne away by the rapid flow of emigration, without a parallel in this part of the country.

Live Stock and Dairy Management.—Two donkeys are employed on the farm for carting and other purposes, that could not be performed by manual labour. I have suggested to the Board of Guardians the necessity of purchasing some cows or pigs, by means of which not only could the farm be made more productive by growing additional (stolen) crops, but the pupils obtain a more complete knowledge of house-feeding and dairy management. It is still under their consideration; and I trust that, after giving it due deliberation, I shall have the pleasure of reporting its favourable result.

Manure.—The manure heap is accumulated from the various refuse matters that can be obtained about the establishment, and which are most carefully collected and deposited in a pit sunk in a suitable portion of the farm. Having observed that its application to the soil, immediately before or after the sowing of the seed, had an injurious effect on the crops, I caused (with a view to remedy the evil) the manure to be dug into the soil in autumn, and found it to be productive of the best effects.

Permanent Improvement.—Drains of sufficient depth have been made leading into the main sewer of the establishment, which, after running along the whole length of the farm, meets with a good outlet, discharging into the Fergus.

Agricultural Improvement, &c.—Agricultural improvement is progressing slowly, but surely, in this locality; the dormant energies of the soil are being aroused into action by the increasing intelligence of its occupiers; and the imperfect mode of cultivation hitherto pursued is fast disappearing before the steady advance of that system introduced by the National Model Farms, with such good effect, into this and the adjoining districts.

Having thus given an accurate, and I hope satisfactory, account of the manner in which the agricultural department of this Workhouse has been conducted, and which is more fully described in the Report of the Agricultural Inspector, I now take the opportunity of returning my most sincere thanks to William H. Lucas, Esq., Poor Law Inspector, who has contributed, by his enlightened supervision and support, to further the interests of this school, and to whom it owes, in no small degree, its present prosperous condition.

MICHAEL MACNAMARA,
Literary and Agricultural Teacher.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	26	10	0
" Paid for Labour,	1	5	0
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	2	18	0
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	0	6	0
" " One year's Rent of Farm,	18	0	0
" " " Poor Rate,	—		
" " " County Cess,	0	12	10¼
To Profit and Loss for balance, being gain on the year,	50	2	1¾
	£99	14	0

Cr.	£	s.	d.
By amount received for Grain,	27	0	0
" " Roots, &c.,	31	14	0
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	41	0	0
	£99	14	0

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dungarvan Union Workhouse Farm.

26. DUNGARVAN POOR LAW UNION AGRICULTURAL NATIONAL SCHOOL, County Waterford.

January, 1855.

School Farm.—The ground under cultivation about this Workhouse contains an area of six statute acres, of which one acre is occupied by *walks* around the several divisions into which it is divided.

The Soil is a "deep loam," resting on a yellow, clayey subsoil, and about twenty feet above the level of the sea.

Date of its Connexion with the Board.—From July, 1851, when the management of the farm was intrusted to my charge, up to the period of its connexion with the National Education Board, I had great difficulty in bringing the land to a proper state of cultivation. At my entrance, I regret to say, that I found only three acres had been under cultivation, and that the Guardians of the union had, in consequence, to purchase £10 worth of vegetables required in making the soup consumed by the inmates. The land generally needed subsoiling, and cleansing from weeds. My first care being the preparation of the soil, I had it subdivided in two divisions, taking one each year during the first two of my connexion with the farm. After the lapse of these two years I applied to place the farm under the superintendence of the Board of Education, having grown several excellent crops thereon, and brought the land from a neglected to an efficient state of cultivation, so much so that the Agricultural Inspector, at his first visit in November, 1853, reported most favourably of the progress we had made.

System of Management.—Though we had grown the several green and root crops in the manner required by the improved systems of agriculture, and carried out "rotations" to meet these requirements, a slight change was effected therein at the instance of the Agricultural Inspector, and in conformity with the system of rotations best suited for workhouse agriculture. The course followed during the past year was a "six-course rotation," introducing flax, laid down with grass-seeds. The flax grew luxuriantly enough, but was damaged materially by the growth of the grasses. The crops under cultivation during the year ended in December, 1854, were principally root crops: parsnips, carrots, mangel-wurzel, turnips, potatoes, with onions, leeks, and some cabbages. The cabbages grew up a very fine crop, many heads having weighed each twenty pounds, and pleased the Guardians so much that they acknowledged never to have seen such excellent cabbage. The bulbs, too, of the mangels were very considerable, several having weighed each twenty pounds. They were transplanted in places where a crop of parsnips had failed. The ground on which the cabbages grew had been trenched in the latter end of autumn, and manured with the contents of the cess-pool. The plants were got in during the last days of February.

Manure.—The manure heap is formed from the refuse straw of the workhouse thrown into the sewers and out-offices, from which it is collected in wheel-barrows, and placed in a large heap at a place formed for the purpose on the land. We place layers of earth at intervals, to prevent the escape of the gases during its decomposition. Forty tons per acre of this manure were applied to the land under mangels and turnips, and fifty to that under parsnips, carrots, and cabbages. The manure is turned into the earth when trenched in autumn or early winter, for parsnips or carrots, but at the time of sowing for the other crops. In the summer months, when the drought is most severe, and the plants in consequence suffer from this cause, we loosen the earth around them, and pour in liquid manure from a tank kept for the pur-

II. Appendix to Dr. Kirkpatrick's Report.

Dungarvan Union Workhouse Farm.

pose. This course we find to have been very beneficial, and to contribute largely to the growth and produce of the crops so treated.

Live Stock.—We have four cows, which are house-fed, being allowed two hours each day for exercise and air. They are fed as yet on the mangel tops principally, receiving only one stone of hay each, daily; indeed they were bought to consume this offal, which the Guardians believed to have been turned to no use previously. Of course we shall give them mangels by-and-by. Their keep has been attended with much success, inasmuch as they have afforded large quantities of milk for workhouse consumption, and thus relieved the rate-payers from some of the expenses incurred in the purchase of milk.

Industrial Class.—Over eighty boys work regularly on the farm for three hours each day; twenty of them, being the number whose proficiency allows them to be made familiar with the principles of agriculture, receive theoretic instruction daily in the school-room, especially a knowledge of those details which more immediately bear on the growth, perfection, and time of sowing of the seeds, the amount of each required, the nature and culture of the several kinds of soils, manures, rotations of crops, &c. The boys have well conducted themselves, and done most of the business of the farm in a satisfactory manner.

Progress of Agricultural Improvement.—Few of the advantages arising from an improved system of husbandry have as yet been known in this locality; nor will they until the schools of the Board, so happily diffusing the blessings of a sound agricultural education throughout the country, shall have been established around us, and the landed proprietors equally with their tenantry become alive to the advantages which they are calculated to confer upon the rising generation.

In conclusion, I beg to state, that I have been guided all along by one great principle in the education of the boys—that of making them industrious labourers. To prepare them, by hardy toil and steady application, for the great business of life, no matter of what kind, is the most prominent part of this education, inasmuch as it instils into them habits of forethought and obedience, and thus contributes to their success in afterlife.

JAMES ROBINSON, Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dungarvan Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	*s.*	*d.*
To amount of Inventory and Valuation at commencement of Year,	86	0	0
" Paid for Labour, Agriculturist's Salary,	40	0	0
" Free Labour of Pupils,		—	
" Paid for Farm Seeds,	5	13	10
" " Manures,		—	
" " Cattle,	10	5	0
" " Feeding Stuffs,	18	12	10½
" " Implements and Repairs,	1	8	4½
" " One year's Rent of Farm,	20	16	8
" " " Poor Rate,		—	
" " " County Cess,		—	
To Profit and Loss for balance, being gain on the year,	55	14	5½
	£288	11	2½

Cr.	£	*s.*	*d.*
By amount received for Grain,		—	
" " Roots, &c.,	30	17	11
" " Cattle Sold,		—	
" " Dairy Produce,	60	7	5½
" " Eggs and Poultry,		—	
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	147	5	10
	£238	11	2½

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dungarvan Union Workhouse Farm.

TABLE showing the CROPPING of the Dungarvan Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Parsnips,	0 2 15	March,	November,	6 lbs.,	4 tons,	8 0 0	2 0 0	—	Seed partly failed.
Carrots,	0 2 15	April,	November,	6 lbs.,	16 tons,	8 0 0	32 0 0	—	
Mangels,	1 2 20	April,	November,	4 lbs.,	35 tons,	7 10 0	22 10 0	—	
Flax,	0 2 0	April,	August,	3½ bushels,	2 tons,	7 0 0	—	—	Injured very much in consequence of grass seeds having been sown with it.
Cabbage,	0 2 10	Succession,	Succession,	8,712 plants,	726 dozen,	6 0 0	12 8 0	—	
Potatoes,	0 0 10	February,	August,	100 stones,	800 stones,	8 0 0	12 0 0	—	
Onions and Leeks,	0 1 10	March,	September,	12 lbs.,	500 stones,	12 0 0	13 0 0	—	The onions only having been calculated on.
Turnips,	1 2 0	June,	December,	4 lbs.,	25 tons,	6 0 0	14 0 0	—	
Cultivated as Kitchen Garden,	0 1 0	—	—	—	—	—	—	—	
Total,	6 0 0								
"STOLEN CROPS."									
Turnips after Vetches,	0 2 0	—	—	—	—	—	—	—	
Cabbages after Onions,	0 1 0	—	—	—	—	—	—	—	
Transplanted Mangels after White Stone Turnips,	0 1 0	—	—	—	—	—	—	—	
Total,	1 0 0								

(Signed), JAMES ROBINSON, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

PETER B. KEANE, Manager.

9th January, 1855.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dunmanway Union Workhouse Farm.

27. DUNMANWAY WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Cork.

January 13, 1855.

Agricultural Instruction.—I have formed into an Agricultural Class twelve in number, who have been reading in the agricultural books since February last, and who are making tolerable proficiency in this branch of their education.

School Farm.—The field allocated for the industrial training of the boys consists of two acres of a peaty soil, having been a reclaimed bog. This I have divided into plots, by making walks through it. In one division I sowed Swedish turnips. The crop was a very fair one. The inmates commenced using them in November last; and at the end of last month I pulled the remainder of them, and put them in store. In part of another division I planted flat Dutch cabbages. These have been also pretty good, and were used off the field. The other crops have been onions (which were not good), different descriptions of cabbage-seeds, and a small quantity of carrots and parsnips.

The only actual outlay was the sum of £4 1*s.* 4*d.* for seed potatoes, which was also the only crop sold, realizing the sum of £16 10*s.* The other crops have been either already used by the inmates, or are stored up for the ensuing season.

With regard to the improvements made by me, I beg to state, that in addition to making eighty perches of walk (fifteen inches in depth, viz., twelve inches of small stone, and three of river gravel), I reclaimed more than half of a very irregular and unsightly manure-yard, and grew a very good crop of Penton cabbages thereon. Round the remaining part I built a neat enclosing wall, leaving space for the taking in and bringing out of the manure. The following are copies of Mr. Brogan's Reports, which will show, that since our connexion with his department, we have not been unsuccessful in our efforts to realize the intentions of the Commissioners:—

24th July, 1854.

Visited for the Commissioners of National Education. Examined twelve boys in the Agricultural Class, and inspected the cultivation of the land allocated for the industrial training of the school-boys. Though there is still great room for improvement, yet, as I consider that a very fair amount of progress has been made in the interval that has elapsed since my first visit, I will recommend the schoolmaster for a gratuity, in consideration of his services in superintending the agricultural training and instruction of the boys. I expect to find the suggestions left at my first visit carried into full effect next season.

9th December, 1854.

Visited for the Commissioners of National Education, to report on the agricultural training and instruction of the Workhouse school-boys. Having examined an Agricultural Class of ten boys, and inspected the management of the land set apart for their practical instruction, I am happy to be enabled to report a very fair amount of progress and proficiency, such as will warrant me in recommending the officer in charge of this department for a gratuity.

I am glad to find that the entire portion of land capable of cultivation has been set apart for the training of the school-boys, and I highly approve of the improvements which the agriculturist proposes to effect on it. As he has stated his intention of sowing a grain crop in the moory portion in the ensuing year, I would suggest that it should previously receive a top-dressing of earth and lime, which will not only insure the success of the grain crop, but permanently improve the land for succeeding crops.

I shall continue to use my best exertions to carry out this useful system of pauper industrial education in such a manner as to merit the approval of the National Board and its officers.

JAMES SCANLAN, Schoolmaster and Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dunmanway Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,		—	
" Paid for Labour,		—	
" Free Labour of Pupils,		—	
" Paid for Farm Seeds,	4	1	4
" " Manures,		—	
" " Cattle,		—	
" " Feeding Stuffs,		—	
" " Implements and Repairs,		—	
" " One year's Rent of Farm,	1	10	0
" " " Poor Rate,		—	
" " " County Cess,		—	
To Profit and Loss for balance, being gain on the year,	17	9	0
	£23	0	4

Cr.

	£	s.	d.
By amount received for Grain,		—	
" " Roots, &c.,	16	10	0
" " Cattle Sold,		—	
" " Dairy Produce,		—	
" " Eggs and Poultry,		—	
" Value of Vegetables consumed,	3	2	6
" Value of Growing Crop,	3	7	10
" Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,		—	
	£23	0	4

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Dunmanway Union Workhouse Farm.

TABLE showing the CROPPING of the Dunmanway Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes, . . .	1 2 0	March, . . .	August, . .	44 stones, .	—	—	18 10 0	—	Sold in ground to farmer.
Turnips, . . .	0 1 0	June, . . .	December, . .	1 lb., . .	4 tons, . .	—	4 0 0	—	
Cabbages, . . .	0 0 24	April, . . .	Used off field, .	12 hundred planted,	—	—	1 0 0	—	
Onions, ...	0 0 7	March, . . .	Used off, . .	8 oz., . .	—	—	0 4 0	—	A very bad crop—seed bad.
Cabbage seed of different sorts, ...	0 0 6	Different periods, .	Now growing, .	—	—	—	0 5 0	—	
Total, . .	1 3 37								
"STOLEN CROPS."									
Globe turnips, . .	0 0 5	—	—	—	—	—	—	—	
Cabbage plants, . .	0 1 20	—	—	—	—	—	—	—	
Total, . .	0 1 25								

(Signed), JAMES SCANLAN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

13th January, 1855. JAMES RYAN, Manager.

Ennis Union Workhouse Farm.

28. ENNIS WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Clare.

14th January, 1855.

Agricultural Instruction.—There are in the Workhouse at present about thirty boys, from fifteen to seventeen years of age, who are industriously employed; and 120, from nine to fifteen years, who receive literary instruction under my care. Of the former, *twenty* are apprenticed to trades, and the remaining *ten* are employed on the farm for six hours each day. Of the boys receiving literary instruction, thirty of them, whose ages vary from twelve to fifteen years, work for three hours each day under the superintendence of the agriculturist and myself. Short as the time is that has elapsed since they commenced operations on the farm, it is surprising to see what progress has been made. Boys who never before handled a farm implement, now work with neatness and skill; and instead of having to be compelled to do it, as is often the case, there is a sort of competition among the other boys in the school to be placed in the class. There is also a considerable change in their appearance. Those who, when confined in a school-room, appeared pale and sickly, are now ruddy and healthy, and not a case of illness has occurred among them for the last nine months. They all feel delighted with their employment, as they see it is the only prospect they ever have of leaving the workhouse. I also find a great change wrought in their habits during the time devoted to literary instruction. They consider that eventually they will be obliged to go abroad in the world, and they feel determined, by their increased attention to business, to be intelligent and active. Most of them can write an excellent hand—have a good knowledge of arithmetic, geography, and grammar—and an hour is devoted each evening to their instruction in the Agricultural Class Books, so that instead of the workhouse being to them a nursery of idleness and crime, it will be the means of making them good and useful members of society.

Model Farm.—The extent of land under cultivation was five and a-half statute acres. A considerable share of success has attended our exertions for the last year. On reference to the "Balance Sheet" it will be seen that on this small farm the large profit of £108 6*s.* 2¼*d.*, being about £20 per acre, has been realized. This has exceeded the most sanguine expectations of the Guardians, and all parties are delighted with the improvement manifested among the boys. Nor is this the only department of the Workhouse that is progressing satisfactorily: forty-seven boys who were apprenticed to the master-tailor have, from time to time, during the last two years left the Workhouse and obtained employment from the most respectable masters in the town of Ennis. Numbers of our weavers have been employed in Ennis and its vicinity, and some of them have even gone to Belfast and parts of England, where they are earning their bread by their trade, and instead of being a burden on the rate-payers for ever, they are on the fair road to respectability and independence.

I could mention many other interesting details illustrative of the benefits of a good industrial system in our Workhouse. This, in a great measure, has been caused by the unceasing exertions of W. H. Lucas, Esq., Poor Law Inspector, for whose kindness and co-operation in carrying out the views of the National Board, I am much indebted. He has been particularly zealous in encouraging agriculture, as he knows that most of the male children at present in the Workhouse must depend on it for support, and I feel happy in acknowledging how much we are indebted to him for his exertions.

MICHAEL BREW, Teacher.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ennis Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	83	1	7
" Paid for Labour,	16	18	6
" Free Labour of Pupils,		—	
" Paid for Farm Seeds,	4	13	2
" " Manures,		—	
" " Cattle,		—	
" " Feeding Stuffs,		—	
" " Implements and Repairs,	4	4	4
" " One year's Rent of Farm,	33	0	0
" " " Poor Rate,		—	
" " " County Cess,		—	
To Profit and Loss for balance, being gain on the year,	108	6	2½
	£250	3	9½

Cr.

	£	s.	d.
By amount received for Grain,		—	
" " Roots, &c.,	89	6	9½
" " Cattle Sold,	17	16	10
" " Dairy Produce,		—	
" " Eggs and Poultry,		—	
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	143	0	2
	£250	3	9½

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Ennis Union Workhouse Farm.

Table showing the Cropping of the Ennis Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
Green Fallow Crops.	A. R. P.								
Turnips, ...	2 2 0	20th May, . .	December, . .	4½ lbs., . .	28 tons, . .	—	—	—	The estimated value of labour is not deducted from the profits of the farm, as nothing was paid.
Cabbages, . . .	1 2 0	At different periods, from 1st February to 1st May,	From 7th June to 18th January, 1855,	—	Not estimated,	—	—	—	The cabbages were planted at different periods, in order to suit the convenience of the Workhouse, in which they are used.
Parsnips, . . .	0 1 0	8th March, . .	From Oct. to Dec.,	6 lbs., . .	16 tons, . .	—	—	—	
Potatoes, . . .	0 1 0	1st March, . .	September, . .	108 stones, .	9 tons, 12 cwt.,	—	—	—	The potatoes were much injured, in consequence of the blight setting in at an early period of the year, and the quantity produced is kept for the use of the Workhouse—market prices being always entered for them.
Onions and Leeks, . .	0 1 0	5th April, . .	September, . .	About 24 lbs., .	20 tons, 12 cwt.,	—	—	—	
Grain.									
Grass.									The expense of cultivation and profit of each item cannot be mentioned, as no accounts exist that would show them.
Grass, ...	0 1 0	—	July, . . .	None, . .	4 tons, . .	—	—	—	
Pasture, ...	0 2 0	—	—	—	—	—	—	—	This was grazed by the Workhouse horse and ass.
Total, . .	5 2 0								
"Stolen Crops."									
Cabbages, . . .	0 1 20	—	—	—	—	—	—	—	In consequence of being obliged to surrender the land on 1st February, it was impossible to have many "Stolen Crops."

(Signed), Michael Brew, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

14th January, 1855.

John Cotter, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Granard Union Workhouse Farm.

29. GRANARD UNION WORKHOUSE AGRICULTURAL SCHOOL, County Longford.

January, 1855.

Agricultural Instruction.—In accordance with a circular from the Poor Law Commissioners, urging an immediate introduction of agricultural training into workhouse schools, the Guardians of this union, so far back as December 1853, ordered that a statute acre of the land (see map) should be set apart for the instruction of an Agricultural Class of school-boys under my supervision. This land, however, remained uncleared of the crop of previous year (sold to various parties) until the month of April following, when about thirty of the school-boys were employed upon it during three hours each day—the adult inmates working occasionally the remainder of the farm. After much correspondence and delay, the Guardians, in the middle of July, resolved to place the entire of the land under the direction of the Board of National Education, and requested to be favoured with the suggestions of the Agricultural Inspector. Accordingly, towards the end of September, Mr. Brogan visited, and after a minute inspection, recommended that the agricultural department should be taken into connexion, and a supply of agricultural books awarded—since which time, however, no books have been received, and, consequently, no regular theoretical instruction has yet been imparted. This will account for the incompleteness of the Return for the past year, but it is hoped that the current one will not witness any impediments to the efficient working of this department—so important an element in the education of the youth of Ireland generally, but in a peculiar degree to the destitute children in our workhouses.

The Agricultural Class, averaging about thirty boys, from nine to fourteen years of age, have acquired some practical, but—owing to the want of text-books on the subject—little theoretical knowledge of agriculture. They now work at least four hours each day on the land, for which their rations have been slightly increased, and the cheerfulness with which they execute any thing within their slender powers, as well as the improvement perceptible in their morals, is very satisfactory.

Farm.—A reference to the accompanying map of the workhouse site and farm, which I have prepared, will show the aspect, extent, and other particulars of this farm, and the portions cultivated exclusively by the school-boys last year. Those parts, though indeed unsuited, produced, under careful management, a fair crop of turnips, carrots, leeks, and parsley. I am now at liberty, and intend to raise from the ground most eligible, such vegetables as will be required for consumption in the house; these will include turnips, parsnips, cabbages, carrots, onions, leeks, parsley, celery, &c.; and I hope to be able to give a more creditable return of our operations in the current year.

Manure.—The only manure used here is that obtained from the cesspools. These are emptied occasionally, the contents mixed with peat-mould, and removed to the manure-pit, where they form a compost with ashes, dead weeds, and other refuse.

W. TIERNEY, Schoolmaster and Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Granard Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	9	12	6
" Paid for Labour,	4	10	0
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	3	17	2
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	10	11	6
" " One year's Rent of Farm,	4	10	0
" " " Poor Rate,	—		
" " " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	64	5	2
	£97	6	4

Cr.	£	s.	d.
By amount received for Grain,	—		
" " Roots, &c.,	60	19	0
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
" For Vegetables consumed in the House,	4	9	10
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	31	17	6
	£97	6	4

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Granard Union Workhouse Farm.

TABLE showing the CROPPING of the Granard Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Turnips,	3 0 3	May and June,	As required in the House; the remainder sold in December.	No account,	Not known.	—	—	—	See Report.
Onions,	0 0 28	March,							
Leeks,	0 0 4	15th May,							
Parsley,	0 0 2	15th May,							
Celery,	0 0 2	March,							
Carrots,	0 0 17	15th May,							
Parsnips,	0 0 7	March,							
Cabbages,	1 1 2	Various times,							
GRAIN.									
GRASS.									
Total,	4 2 25								

(Signed), WILLIAM TIERNEY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

6th January, 1855.

BERNARD M'MANY, Manager.

30. KELLS WORKHOUSE AGRICULTURAL SCHOOL, County Meath.

II. Appendix to Dr. Kirkpatrick's Report.

Kells Union Workhouse Farm.

30th December, 1854.

In December, 1853, it was resolved by the Board of Guardians that ne statute acre of ground be exclusively appropriated for the school-oys, in order to afford them the great advantage of uniting scientific nstruction with practical training in the operations on the farm.

Agricultural Class.—There are at present fifteen boys selected from he more advanced classes receiving theoretical instruction in the chool every day from eight o'clock till nine in the morning, and after chool duties the remaining part of the day is devoted to agricultural ndustry.

Workhouse Farm.—The cultivated land attached to this establishnent consists of 3A. 1R. 10P. statute measure, of dry, deep, and fertile oil. A good portion of this ground had been well trenched during he winter previous to my appointment (27th February, 1854). Yet here was a great deal of labour still requisite to prepare for green rops, as all the work of the farm was performed with the spade. bserving there were but few able-bodied male paupers in the house, thought it prudent to solicit the schoolmaster's co-operation in pernitting the boys to work on the farm, and I am happy to say, the esults derived from this course have been highly advantageous. From he first day of March till the end of April our time was principally ccupied in preparing for green crops, digging, levelling, manuring, and learing off weeds. Some seeds requiring early vegetation were also own during this period. The greater part of the farm was under urnips this year, with some onions, parsnips and carrots, which crops he Board of Guardians have considered the most profitable and appropriate for the use of the house.

Cropping.—Onions.—After the ground for the onions had been properly prepared for the reception of the seed, it was laid out in beds three and one-half feet wide, and the sowing finished before the end of the first week in April.

Parsnips and Carrots.—The ground for these crops was dug in the month of October, and in spring I had sufficient manure spread over the surface and dug deeply into the ground. When the sowing season commenced, the ground was repeatedly dug till it acquired a level pulverized surface. The parsnip seed was sown the first week of April, and the carrots before the end of the second week—both being carefully finished by consolidating the tops of the drills.

Turnips.—Skirving's improved green and purple-topped were sown from the middle of May till the 1st of June, and white stone from the middle of June till end of July, in regular succession. I feel much pleasure in stating that the luxuriant produce and fine quality of the above crops, attracted public notice, and have been highly admired by the Board of Guardians. The table annexed to this Report shows a list of the crops grown upon the farm, the extent of ground under each, with their respective estimated produce and value.

In conclusion, I beg to acknowledge the kind assistance I have invariably received from the master of the house, whose extensive knowledge of agriculture, both theoretical and practical, rendered his co-operation extremely beneficial in the management of this department.

MICHAEL SMITH, Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Kells Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	11	15	7	By amount received for Grain,	—		
" Paid for Labour,	—			" " Roots, &c.,	9	10	0
" Free Labour of Pupils,	—			" " Cattle Sold,	—		
" Paid for Farm Seeds,	1	16	4½	" " Dairy Produce,	—		
" " Manures,	—			" " Eggs and Poultry,	—		
" " Cattle,	—			By Inventory and Valuation taken at the close of the year, inclusive of proportion of permanent unexhausted improvements,	67	14	3
" " Feeding Stuffs,	—						
" " Implements and Repairs,	5	15	0				
" " One year's Rent of Farm,	6	12	6				
" " Poor Rate,	—						
" " County Cess,	—						
To Profit and Loss for balance, being gain on the Year,	51	4	9½				
	£77	4	3		£77	4	3

TABLE showing the CROPPING of the Kells Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips, Swedes, . .	1 3 7	May and June, .	December, . .	4 lbs., . .	20¾ tons, . .	5 4 0	14 4 0	—	Turnips valued at 16*s.* per ton.
Turnips, white stone, .	0 2 0	June and July,	August, September, and October,	4 lbs., . .	15 tons, . .	5 0 0	4 0 0	—	Valued at 12*s.* per ton.
Parsnips, ...	0 1 25	1st week in April, .	November, . .	6½ lbs., . .	5½ tons, . .	8 0 0	17 13 4	—	Valued at £4 13*s.* 4*d.* per ton.
Carrots, ...	0 1 9	1st week in April, .	November, . .	6¾ lbs., . .	8 tons, . .	8 0 0	24 0 0	—	Valued at £4 per ton.
Onions, ...	0 0 35	1st week in April, .	October, . .	5 lbs., . .	3 tons, 6 cwt., .	8 10 0	17 18 0	—	Valued at £8 per ton.
Cabbages, . . .	0 0 14	August, .	Transplanted in October, .	Not ascertained,	Not known,	Not known,	Not ascertained.	—	
GRAIN.									
GRASS.									
Total, . .	3 1 10								

(Signed), MICHAEL SMITH, Agriculturist.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

30th December, 1854.

RICHARD CHALONER, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Kilmacthomas Union Workhouse Farm.

31. KILMACTHOMAS WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, January 12, 1855.

Agricultural Instruction.—On the 14th of February last I entered on my duties here as schoolmaster and agriculturist. There were then fifty-six boys in the school who had not previously received any agricultural instruction in the school, though they had for some time been working on the farm. I formed an agricultural class of fifteen of the more advanced boys, who also constituted the industrial class. The remainder were too small to be capable of using farm implements, but in the fine weather most of them go out during working hours, and are employed at light work—such as collecting stones off the ground, picking weeds, &c.

The hours for school instruction are from nine till eleven, A.M., and from half-past three till five, P.M.; and the hours on the farm, eleven, A.M., till half-past two, P.M., in winter. In summer they work an additional hour from five till six, P.M. Agricultural instruction is given during winter for half an hour, and in summer for an hour, on Tuesdays, Thursdays, and Fridays. The number of boys in the school has diminished about one-third since I came here, being reduced to thirty on the last day of December. The agricultural class consists still of the same number as at first; for as soon as the boys in the junior classes are able to read with tolerable accuracy I take them into the agricultural class. Their deficiency in reading makes their progress in agricultural knowledge slow, though their attention to the subject is very good.

Farm.—The farm, after deducting the area under buildings, consists of 12A. 3R. 4P. It is a very good and naturally dry soil. None of it had been cropped previous to my taking charge, except a small plot under cabbages. There was a large quantity of earth about the house, taken from the foundation of the buildings, which has been since removed. During the last year I had about one acre three roods under green crops, and seven acres one rood under oats. The green crops gave a good yield; but the grain, from the lateness of the season at which the land was prepared, and the long drought which succeeded the time of its sowing, was rather light. The only manure used was that obtained from the house. It is collected in tanks, when earth is frequently thrown in to prevent escape of effluvia, and to increase the manure. The contents are removed occasionally from these tanks to the heap, and there kept covered with earth.

The only permanent improvements effected during the year were, the levelling of an old fence, and the removal of two large mounds of earth. Although the removal of the earth was attended with a good deal of expense, still, as this work tended more to the improved appearance of the place than to the improvement of the farm, no portion of the expense has been placed to the credit side of the farm account, and this makes the apparent loss on the operations of the year greater than it really is.

Agriculture is in a pretty forward state in this neighbourhood. I cannot say that it has been influenced as yet by what has been done on this farm, but I trust our example will soon be worthy of imitation.

In conclusion I have to state, what I believe most people now admit, that there is nothing more likely to render the young inmates of workhouses useful members of society, when they grow up, than proper industrial training; and I am quite certain that the few hours they labour, daily, does more to render them orderly and contented than any other course of discipline that could be practised.

JOHN M'CAFFRY, Teacher and Agriculturist.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Kilmacthomas Union Workhouse Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	12	18	8	By amount received for Grain,	25	10	0
" Paid for Labour,	19	19	6	" " Roots, &c.,	10	14	5
" Free Labour of Pupils,		—		" " Cattle Sold,		—	
" Paid for Farm Seeds,	5	13	2	" " Dairy Produce,		—	
" " Manures,		—		" " Eggs and Poultry,		—	
" " Cattle,		—		By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	30	15	1
" " Feeding Stuffs,		—					
" " Implements and Repairs,	7	18	7				
" " One year's Rent of Farm,	12	15	6				
" " " Poor Rate,		—					
" " " County Cess,		—					
To Profit and Loss for balance, being gain on the year,	5	14	1				
	£66	19	6		£66	19	6

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Kilmacthomas Union Workhouse Farm.

TABLE showing the CROPPING of the Kilmacthomas Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips, ...	1 0 9	1st to 30th May, .	November, . .	4 lbs., . .	15 tons, 5 cwt.,	4 15 0	6 13 2	—	
Mangels, ...	0 0 27½	1st May, . .	November, . .	6 lbs., . .	22 tons, 4 cwt.,	4 15 0	16 9 0	—	
Carrots, ...	0 0 28½	April, . . .	November, . .	6 lbs., . .	5 tons, 12 cwt.,	6 5 0	4 10 0	—	
Onions, ...	0 0 8½	April, . . .	—	20 lbs., . .	9 tons, 1 cwt., .	10 6 10	23 8 0	—	
Cabbages, ...	0 0 29	April, . . .	—	—	24 tons, . .	6 15 0	2 4 0	—	
GRAIN.									
Oats, ...	7 1 0	March, . . .	September, . .	12 stones, .	5 brls., 4 stone,	2 5 0	1 7 6	—	
GRASS.									
Waste, ...	3 3 2½	—	—	—	—	—	—	—	
Total, . .	12 3 4								
"STOLEN CROPS."									
Cabbages, ...	0 0 19	November.	—	—	—	—	—	—	
Total, . .	0 0 19								

(Signed), JOHN M'CAFFRY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

19th January, 1855. WILLIAM HUNT, Manager.

Mountbellew Union Workhouse Farm.

32. MOUNTBELLEW UNION WORKHOUSE AGRICULTURAL SCHOOL, County Galway.

The Agricultural Class consisted, through the year, of an average of twenty-four boys, from twelve to fifteen years of age, and are instructed by the literary teacher, four days each week, in the "Agricultural Class Book," and the "Agricultural Instructor," which lessons are reduced to practice, as they work on the land for four and a-half hours daily, under his supervision. The division of time for the male pupils is—two hours schooling before breakfast; four and a-half hours from breakfast to dinner time at agricultural and other industry; and two hours schooling after dinner. This arrangement was made by the Guardians that the children might have the undisturbed benefit of the industrial teacher's instruction, whose time of attendance is from breakfast to dinner, without interfering with the times of instruction given by the literary teacher (before the arrival and after departure from the house of the other instructors). In addition to those specially forming the agricultural class, the smaller boys are very frequently instructed in agricultural lessons, and brought to do light work on the land. The agricultural class receive an extra allowance of two ounces of bread, daily; and when any leave the establishment, their places are at once filled up from the junior boys, who look on the change as a promotion.

The farm contains over six statute acres, of which 5A. 3R. 35½P. were under cultivation; and previous to last year the whole farm was waste and neglected for years, being, besides, intersected by a number of fences, which had to be levelled.

Rotation of Cropping.—A "seven-course green crop shift" has been laid down this year. The returns have not been as remunerative as may be expected in future years.

The manure used was night-soil, deodorized with peat-mould, with which the privies are kept constantly filled; this renders the contents inoffensive, and the cleansing of them at all times practicable. This mixture is put into heaps, interlayered with the refuse straw from the old bedding, and the suds and soap lees, preserved by a tank at rere of the laundry, are poured on those heaps.

The live stock are four pigs and a donkey. On the suggestion of Mr. Brogan I recommended the Board of Guardians to purchase the pigs; and anxious, as they always have been, to promote the instruction of the children, and render them in future time self-reliant agents of productive industry, and good members of society, they at once adopted it. The stock are fed on the vegetable offal of the farm, and are attended by two of the school boys, who, by this means, acquire a practical knowledge of their treatment and management.

PATRICK JOYCE, Master and Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Mountbellew Union Workhouse Farm.

SUMMARY of the YEAR, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	36	18	2
" Paid for Labour,	—		
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	7	15	4¼
" " Manures,	0	6	6
" " Cattle,	9	14	6
" " Feeding Stuffs,	—		
" " Implements and Repairs,	1	16	0
" One year's Rent of Farm,	6	0	0
" " Poor Rate,	—		
" " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	35	14	7
	£98	5	1¼

Cr.	£	s.	d.
By amount consumed in House by inmates,	29	6	8¼
" received for Flax worked up of last year's balance,	3	0	0
" " Cattle Sold,	2	17	9
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	63	0	8
	£98	5	1¼

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Mountbellew Union Workhouse Farm.

TABLE showing the CROPPING of the Mountbellew Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	1 3 31	March and April,	—	69 stones,	4 tons,	1 12 4*	13 13 10½	—	About one rood was Lumpers, of which three-fourths were unfit for use from blight.
Parsnips,	0 1 20½	March,	—	6½ lbs.,	5 tons,	1 4 8*	3 0 9	—	
Carrots,	0 2 12	12 April,	—	4½ lbs.,	—	0 10 10*	20 8 9	—	An extremely bad crop, nearly three-fourths failed; land was very stiff; got very wet weather after putting in the seed; then sudden drought.
Onions,	0 1 11	10th to 16th April,	—	9½ lbs.,	6 tons,	4 14 7*	7 4 2	—	
Turnips,	1 3 14	May and June,	—	3 lbs.,	18 tons,	0 5 10½*	21 19 6	—	The fly being most destructive to this crop on its first appearance over ground, I steeped the seed in water charged with sulphur, and it had the effect of checking its ravages.
Cabbages,	0 2 20	In succession,	—	—	—	—	11 10 0	—	The plants obtained from seed sown.
Other vegetables, on small scale.	—	—	—	—	—	—	—	—	
Flax,	0 1 21	—	—	2½ bushels,	—	2 4 6*	2 18 0	—	A portion of this was at first very miserable; applied liquid manure, and it turned out a fair crop.

* Seed only.

(Signed), MICHAEL LEWIS, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 11, 1855. PATRICK JOYCE, Master and Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Naas Union Workhouse Farm.

33. NAAS WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Kildare.

Agricultural Instruction.—A class of twenty-four boys receive agricultural instruction from the schoolmaster, in the books supplied by the Board of Education, for half an hour each day. The class has not been formed a sufficient length of time for any marked improvement to be perceptible.

Industrial Class.—The above number is divided into two divisions, who work alternately on the farm for four hours each day. Considering their youth (from ten to twelve years of age) they work very well, and are most attentive. Many of them are employed by farmers, who speak favourably of their subsequent conduct.

School Farm.—The extent of land under cultivation is about six statute acres. The soil is of very fair quality, and requires no improvement beyond due preparation for the various crops. The result of the past year's cropping was satisfactory; and the crops were allowed by all who inspected them during their growth to be excellent.

No live stock are kept, which is a drawback on the efficiency of our labours, as a great deal of waste leaves, &c., that would go far in supporting such, are thrown into the manure pit.

Agricultural Improvement.—Agriculture is in a very forward state in this district. The farmers, after our example, are beginning to pay more attention to the after-culture of their green crops.

MICHAEL GERAGHTY, Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report

Naas Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	3	10	0
" Paid for Labour,	0	12	10
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	10	5	10½
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	3	6	11
" " One Year's Rent of Farm,	15	13	6
" " " Poor Rate,	—		
" " " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	72	5	11
	£105	1	0

Cr.	£	s.	d.
By amount received for Hay,	2	2	6
" " Roots, &c.,	92	10	4½
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	11	2	2
	£105	15	0½

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Navan Union Workhouse Farm.

34. Navan Workhouse Agricultural National School, County Meath.

3rd January, 1855.

In November, 1853, the utility of affording the workhouse school boys both a theoretical and practical knowledge of agriculture, was suggested by the District Inspector (W. A. Hunter, Esq.) to the Board of Guardians, who immediately concurred with him, and allocated a portion of ground, containing 1a. 1r. 14p. (statute measure), to be cultivated exclusively by the school-boys, under my directions. When this piece of ground was given in charge to me, I was rather despondent, for I anticipated its culture would be any thing but satisfactory, in consequence of the weakness of the help available for this purpose; for at any time I had not more than twelve able to handle a spade, and even these were generally young, (aged from nine to thirteen years), and were besides totally ignorant of manual labour. However, through extraordinary exertions, and untired perseverance, as also the unceasing encouragement afforded by Mr. Hunter, in forwarding the progress of this useful system, the results have turned out satisfactory, as will appear from the statistical returns, and balance sheet appended to this Report.

Agricultural Class.—The agricultural class comprise the boys of second, third, and fourth classes, and it affords me much pleasure to say that their attention and conduct, when out on the farm, are most gratifying. There are at present twenty boys receiving theoretical instruction in agriculture from half-past nine till ten o'clock every morning, and from half-past two till five o'clock in the afternoon on the farm, putting the theory into practice, the intervening time being devoted to literary instruction in the schoolroom.

Manure.—This useful appendage to soil is collected from the cast straw of beds, and privy receptacles, which being discharged every morning into a tank about forty yards south-west of the building, are then covered with peat-mould, to prevent the escape of ammonia, &c.

School Farm.—The situation being to the north of the building, is consequently unfavourable for vegetation, the soil being deprived of the powerful agency of the sun's heat until mid-day; but it is convenient, being to the right of school-boys' yard. About three-fourths of the soil is pretty good, it may be termed a clayey loam, the remainder being of a gravelly nature, resting on a subsoil of reddish clay.

Cropping.—The crops grown were, onions, parsnips, carrots, mangel-wurzel, and turnips, all of which were kept for the use of the house, except the mangels, which were sold by public auction, at the rate of £19 per Irish acre.

Onions.—The ground for this crop was reduced to a proper state of pulverization by several diggings; it was well supplied with manure, then lightly dug, so as to keep the fine mould on the surface for the reception of the seed; laid off in beds four feet wide, and the seed sown about the third week in March.

Parsnips and Carrots.—These crops were sown in drills, twenty inches apart. The seed of the former was put in holes made with a dibble, eight inches apart, and one in depth; and that of the latter was put in rows along the surface of the drills, then covered with fine mould, and rolled with a light roller.

Mangels and Turnips.—The preparatory operations for these crops were identical with that of the parsnips, and carrots, and the sowing was the ordinary drills. The after-culture was attended to diligently, and the general appearance of the farm so much attracted Mr. Hunter's

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II. Appendix to Dr. Kirkpatrick's Report.

Navan Union Workhouse Farm.

attention, that on the occasion of his visit in May last, he gave the following report: "The industrial department appears to be carefully attended to, considering that the boys are few, and generally very young, it will be acknowledged that the experiment set on foot for employing the boys on the ground has been very successful. It appears to me that the work is well done, and that the seeds have been put down in good time."

General Remarks.—No regular rotation has been carried out this year, as I understood it was the wishes of the Guardians to grow the crops most appropriate for the use of the house; but as Mr. Brogan, Sub-Inspector of Agricultural National Schools suggested a rotation, I shall endeavour to comply with his wishes. The following are the observations left at his visit of the 29th September, 1854:—"Visited for the Commissioners of National Education. Present, forty-one pupils. Examined, fourteen boys in the agricultural class, and inspected the cultivation of the portion of land allocated for the industrial training of the school-boys. There appears a very fair amount of progress in this department since my previous visit, but I have to suggest that some regular rotation be adhered to in the cropping of the land."

In conclusion, I beg to offer my most grateful thanks to John Mullen, Esq., Manager, for his kindness in responding to my wishes whenever I suggested any improvement calculated to enhance the success of the farm, or to add to the efficiency of the schools.

JOHN M'ENERNEY, Teacher and Agriculturist.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Navan Union Workhouse Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	—		
" Paid for Labour,	—		
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	1	2	5½
" " Manures, valued,	3	6	0
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	3	12	0
" " One year's Rent of Farm, " " " Poor Rate, " " " County Cess,	3	6	0
To Profit and Loss for balance, being gain on the year,	14	3	2½
	£25	9	8

Cr.

	£	s.	d.
By amount received for Grain,	—		
" " Roots, &c.,	4	17	4½
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	20	12	3½
	£25	9	8

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II. Appendix to Dr. Kirkpatrick's Report.

Navan Union Workhouse Farm.

TABLE showing the CROPPING of the Navan Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Onions, ...	0 0 6	March, . . .	October, . .	12 lbs., . .	50 cwt. . .	—	—	—	A very thin crop.
Parsnips, ...	0 0 17	March, . . .	November, . .	2¼ lbs., . .	8 tons, . .	Not ascertained.	Not ascertained.	—	A good crop.
Carrots, ...	0 1 13	March, . . .	November, . .	7¼ lbs., . .	16 tons, . .	—	—	—	
Mangel, Long Red, . .	0 1 27	May, . . .	November, . .	6 lbs., . .	Not known.	—	—	—	
Turnips, Swedes, . .	0 1 31	May, . . .	November, . .	5 lbs., . .	18 tons.	—	—	—	

(Signed), JOHN M'ENERNEY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 3, 1855. JOHN MULLEN, Manager.

Newtownards Union Workhouse Farm.

35. NEWTOWNARDS WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Down.

15th January, 1855.

Agricultural Instruction.—When I was appointed in April last, I found that not only had my predecessor resigned the charge of the portion of land specially allocated for the industrial training of the boys, but that the "agricultural class," which he had been accustomed to instruct in the theory of agriculture, was discontinued for some time previous to his resignation.

At my commencement, therefore, that portion of land was under crop by direction of the master, as well as the greater part of the remaining ground belonging to the workhouse, and none was available for the exclusive working of the agricultural class.

During the greater part of the season, however, the boys were taken out for two or three hours every day, by myself, to the grounds, where, under my immediate directions and instruction they were engaged at the various manual operations which were deemed suited to their physical capabilities. As soon as I had a sufficient number of intelligent and promising boys at my disposal, I re-organized an agricultural class, which I continue to instruct for half an hour, each day, in the theory of agriculture. Their progress, although slow, is not inferior to what could be reasonably expected of them, considering their youth; besides a number of them are learning the tailoring, and shoemaking trades, and are occasionally taken out and bound as apprentices. Hence the difficulty arises of keeping up the class, for many of these have been longest in the house, and therefore the most intelligent.

I would further remark that although there was no particular part of the land set apart for their instruction during the past year, it is my opinion that much practical good must have resulted from the course pursued, which appeared the most judicious plan then available, viz: to work occasionally over the farm when and where their labour was most useful, and might be most instructive. It is my intention to take charge of as much ground in the ensuing spring as I consider the number, strength, and skill of the boys, under my charge, will enable me to cultivate, in a systematic and efficient manner. I hope by the adoption of this course to be able both to show the superiority of the new over the old system of cropping, and furnish more satisfactory statistical returns on the working of the agricultural school here, during the ensuing year.

ROBERT DAVIS, Schoolmaster.

Oldcastle Union Workhouse Farm.

36. OLDCASTLE WORKHOUSE AGRICULTURAL SCHOOL, County Meath.

16th January, 1855.

Farm.—The quantity of ground under cultivation, amounts to 8A. 0R. 13P. statute measure, of which 5A. 1R. 13P. is without the boundary wall, and under a two-course rotation.

The portion inside the boundary wall contains 2A. 3R. cultivated on a four-course rotation, from which is raised a supply of vegetables for the use of the establishment; and here the soil is of a very superior quality—deep, dry, and friable, and peculiarly adapted to the growth of green crops.

Agricultural Instruction.—The number of boys receiving theoretical instruction in agriculture varied from three to twenty-five, and the daily average attendance, from thirty to ninety boys, during the past year, but all assist at the various practical operations on the farm.

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Oldcastle Union Workhouse Farm.

The number in this class may appear small, but the circumstance must be attributed to the backward state of their literary acquirements, which renders them for the most part incapable of receiving any thing but a practical knowledge of agriculture.

The most cheering aspect, however, about the establishment is the fact that no sooner do these boys (all of whom are under fifteen years), acquire this practical knowledge of agriculture, than they are eagerly sought after by the farmers of the locality, from many of whom I received satisfactory accounts, both as regards their industry and general good conduct. This circumstance speaks volumes in favour of combined literary and industrial education.

Manure.—The manure is collected in two large tanks which communicate by sewers with the privies, kitchen, and laundry. Clay, straw, and other absorbent matter are collected to the tank for the purpose of being mixed with its contents, and when perfectly saturated are formed into heaps, and covered with clay to prevent the escape of the volatile gases.

ALEXANDER M'DONNELL, Schoolmaster and Agriculturist.

[SUMMARY, &c.

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II. Appendix to Dr. Kirkpatrick's Report.

Oldcastle Union Workhouse Farm.

SUMMARY of the YEAR, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	—		
,, Paid for Labour,	—		
,, Free Labour of Pupils,	—		
,, Paid for Farm Seeds,	7	1	7
,, ,, Manures,	—		
,, ,, Cattle,	—		
,, ,, Feeding Stuffs,	—		
,, ,, Implements and Repairs,	—		
,, ,, One year's Rent of Farm,	16	16	3
,, ,, ,, Poor Rate,	—		
,, ,, ,, County Cess,	0	5	1
To Profit and Loss for balance, being gain on the year,	47	6	10½
	£71	9	9½

Cr.	£	s.	d.
By amount received for Grain,	26	9	11
,, ,, Roots, &c.,	44	19	10½
,, ,, Cattle Sold,	—		
,, ,, Dairy Produce,	—		
,, ,, Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	—		
	£71	9	9½

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Oldcastle Union Workhouse Farm.

TABLE showing the CROPPING of the Oldcastle Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation. Profit.	Result of Cultivation. Loss.	Observations.
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes,	0 3 15	17th April,	September,	18 cwt.,	—	—	—	—	The expense of cultivation cannot be ascertained, inasmuch as the land was tilled by the school-boys working about three or four hours daily; nor can the produce per acre be made out, with any thing like certainty, as the principal crops were disposed of by auction while growing.
Turnips,	2 2 9	10th May,	November,	6 lbs.	—	—	—	—	
Parsnips,	0 0 32	28th March,	October,	8 lbs.	—	—	—	—	
Carrots,	0 0 32	29th March,	October,	8 lbs.	—	—	—	—	
Onions,	0 1 8	1st April,	October,	12 lbs.	—	—	—	—	
Cabbage,	0 1 21	15th March,	Variable,	8,000 plants.	—	—	—	—	
GRAIN.									
Oats,	2 3 4	10th March,	September,	12 stones.	—	—	—	—	
GRASS.									
Hay,	0 3 9	—	July,	—	—	—	—	—	
Total,	8 0 13								
"STOLEN CROPS."									
Total,	—								

(Signed), ALEXANDER M'DONNELL, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

15th December, 1854.

EDWARD PLUNKETT, Manager.

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II. Appendix to Dr. Kirkpatrick's Report.

Skibbereen Union Workhouse Farm.

37. SKIBBEREEN WORKHOUSE AGRICULTURAL SCHOOL, County Cork.

8th January, 1855.

Agricultural Instruction.—A class of thirty-two boys is instructed by me for an hour every day, in school, after the ordinary school business is over—most of whom can read in the Agricultural Books supplied by the Board of Education. They have been for the most part taken out of the "second class." Their progress must be slow, in consequence of the backwardness of their literary education and their youth, their average age being about ten years. However, I am glad to have to state that their general improvement far exceeds what might be anticipated from such a class.

Particular attention is directed to their instruction in both the theoretical and practical details of agriculture, and to the inculcation of habits of industry and economy. The accumulation and preservation of the manure have been carefully attended to.

School Farm.—The contents of the farm under cultivation, in connexion with this Workhouse, for the year 1854, were five acres, statute measure, the entire of which is a clay soil resting on a subsoil of rock. The crop was a good one, with the exception of the entire failure of the carrots, which was owing to the bad seed got in this town. All the crops have been used in the house, with the exception of some cabbage plants, which were sold, as not wanting on the farm.

No regular rotation of crops has been carried out here, nor is it intended to establish any, as directions were given by the Guardians to grow the crops most profitable and appropriate for the use of the house; but I always take care to change the crops every year as much as possible. I am happy to say that for the last two years there has not been an able-bodied male pauper in this house—so the farm is entirely cultivated by the school-boys (numbering seventy-seven at present) after school hours, and occasionally for an hour before school opens.

In conclusion, I beg to say, that as regards the general economy of the farm, and instruction of the boys while under my charge, nothing on my part shall be wanting to render both worthy of imitation.

PATRICK M'CARTHY, Teacher and Agriculturist.

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II. Appendix to Dr. Kirkpatrick's Report.

Skibbereen Union Workhouse Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.	*Cr.*	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	28	0	0	By amount received for Grain,		—	
" Paid for Labour,		—		" " Roots, &c.,	58	19	10
" Free Labour of Pupils,		—		" " Cattle Sold,		—	
" Paid for Farm Seeds,	7	18	2	" " Dairy Produce,		—	
" " Manures,		—		" " Eggs and Poultry,		—	
" " Cattle,	1	17	6	By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	41	9	6
" " Feeding Stuffs,		—					
" " Implements and Repairs,	3	2	0				
" " One year's Rent of Farm,	5	0	0				
" " " Poor Rate,		—					
" " " County Cess,		—					
To Profit and Loss for balance, being gain on the year,	54	11	8				
	£100	9	4		£100	9	4

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Skibbereen Union Workhouse Farm.

TABLE showing the CROPPING of the Skibbereen Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potato onions,	0 0 7	4th February,	June,	Planted 8 in. apart in every way,	14 tons,	No rent or taxes. Labour of paupers gratuitous.	Not ascertained.		Been sown for propagation.
Cabbages,	1 1 26	Successionally,	Successionally,	13,860 plants,	35 tons.				
Parsnips,	0 2 2	8th March,	November,	8 lbs.,	10 tons.				
Seed onions,	0 0 18	18th March,	August,	16 lbs.,	5 tons.				
Leeks,	0 1 19	18th March,	From 26th August to April,	16 lbs.,	Not ascertained.				
Turnips,	2 1 39	April, May, & June,	December,	6 lbs.,	23 tons.				Turnip seed sown in parts three times, through the attack of the fly; transplanted also.
Carrots,	—	March and May,	Failed,	—	—				Cabbages instead of the carrots.
GRASS.									
Clover,	0 0 9	April,	Summer next,	25 lbs.,	Not ascertained.				
Total,	5 0 0								

(Signed), PATRICK M'CARTHY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

8th January, 1855. JOHN DAVIS, Manager.

38. STRABANE WORKHOUSE AGRICULTURAL SCHOOL.

II. Appendix to Dr. Kirkpatrick's Report.

Strabane Union Workhouse Farm.

January, 1855.

The farm connected with the school consists of 12A. 3R. 36P. Of this there are at present only 9A. 2R. 38P. under cultivation, the remaining portion being so elevated that manure cannot be got to it except by carrying it in handbarrows, which cannot be done for want of proper assistance; further, the greater part of it is rocky and uneven, which would render the cultivation of it very expensive. It was originally purchased for a fever hospital site, and is now permanently laid down in grass, being used, in the summer months, for recreation ground for the convalescent fever patients, as well as for those of the house hospital.

There has hitherto been no regular system followed in cropping the land, but I intend to adopt the four-course rotation on the part at present in tillage.

For some time past there have been but few able-bodied male paupers in the house, so that the work of the farm, with occasional assistance of horse labour, devolves on the school-boys. There are at present twenty boys, who work before and after school hours.

I was appointed as agriculturist in May, 1853, and, on the resignation of the schoolmaster, in March, 1854, to the united offices of schoolmaster and agriculturist. Since then I have witnessed a great improvement both in the conduct and industry of the boys, who do much better when under the control of only one person, both in the *school-room* and on the *farm.*

Agricultural Instruction.—The Agricultural Class consists at present of twenty-eight boys, divided into two divisions—those who can read and those who cannot. Though all do not work on the farm, some being employed weaving, and a few too delicate to do out-door work, yet each may receive information which may afterwards be useful to him.

Previous to the receipt of the Agricultural Books in October last, the instruction was chiefly oral, but since that time those able to read the books were allowed to do so two hours each night, in addition to half an hour's instruction from me daily. The boys not able to read also get instruction suited to them. I have always endeavoured to render the lesson interesting, so as to fix the attention of the class and impress the subject better on the minds of the pupils. I feel confident that but few boys of the same age, under the same circumstances, possess more intelligence or a greater desire to gain information relative to agriculture.

Live Stock, &c.—We have but two pigs, which are fed on the produce of the farm.

Adjacent to the piggery is the manure pit, where every available substance for manure is collected and regularly covered over with peat-mould. The manure, when carted to the field, is immediately covered in.

The boys are much looked after by the farmers of the surrounding country, who, with a few exceptional cases, report favourably both of their conduct and industry. I have no doubt but the instruction given the pauper boys will, in the end, be productive of much good to the country in general.

ROBERT SCOTT, Schoolmaster and Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Strabane Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	38	0	0
" Paid for Labour,	5	1	6
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	7	9	9
" " Auction Fees, &c.,	1	14	6
" " Cattle,	—		
" " Feeding Stuffs,	0	12	10
" " Implements and Repairs,	—		
" " One year's Rent of Farm,	26	18	8
" " " Poor Rate,	1	15	7
" " " County Cess,	2	19	7
To Profit and Loss for balance, being gain on the year,	21	5	8
	£105	18	1

Cr.

	£	s.	d.
By amount received for Grain,	8	1	4
" " Roots, &c.,	32	16	3
" " Pigs sold,	19	8	8
" " Rent of grass land,	8	4	0
" of Vegetables and Potatoes used in House,	18	7	10
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	19	0	0
	£105	18	1

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Strabane Union Workhouse Farm.

TABLE showing the CROPPING of the Strabane Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied. A.	R.	P.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation. Profit.	Loss.	Observations.
GREEN FALLOW CROPS.											
Potatoes,	0	2	26	March,	September,	8 cwts.	The crops were sold by auction—the weight was not ascertained.	Not calculated.	—	—	The potatoes were much injured by blight; very few were fit for use when raised.
Mangels,	0	3	19	May,	November,	5 lbs.					
Turnips,	0	0	32	May,	December,	5 lbs.					
Onions,	0	0	8	April,	September,	10 lbs.					
Leeks,	0	0	18	April,	—	10 lbs.					
Cabbages,	0	2	0	From Feb. until May,	—	—					
GRAIN.											
Wheat,	1	3	0	December,	September,	10 stones,			—	—	This crop lodged early in the season and was much injured thereby.
GRASS.											
Grass,	4	2	25	April,	June.	—					
Fever Hospital ground,	3	0	38	—	—	—					
Grave-yard, walks, &c.,	0	3	30	—	—	—					
Total,	12	3	36								
"STOLEN CROPS."											
Winter Greens,	0	0	8	—	—	—					

(Signed), ROBERT SCOTT, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

8th January, 1855. DAVID M'MENAMIN, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Strokestown Union Workhouse Farm.

39. STROKESTOWN WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Roscommon.

10th March, 1855.

Workhouse Farm.—At my appointment as agriculturist in February, 1853, the Guardians having only received possession of the new Workhouse from the contractor the previous harvest, and no steps having been previously taken to put the farm in order, I found it in almost as bad a state as it was possible for land to be. No fences existed except around a portion allotted for a burial ground. One-sixth of the entire surface was incumbered with heaps of stones and rubbish, and an equal area was so trodden down during the erection of the Workhouse, that it could only be turned up by the aid of picks. There were no farm roads or approaches to the establishment; and the Workhouse yards were merely levelled, without being either macadamized or gravelled. Further, such portions of the land as were suited for tillage were completely exhausted by the previous occupants, and intersected with old dikes, ditches, and pits, and in a lamentable state for drainage. When it is considered that I had to face all these difficulties, with a supply of labour scarcely equal to the strength of a dozen able-bodied men, you will have some idea of the arduous nature of the task I had to perform. But by persevering industry, and making the most judicious use of the slight help available, almost all these difficulties have now been surmounted.

The quantity of land added to the farm by levelling old ditches and improving the remaining fence, exceeds a statute acre.

The land, by growing two successive manured green crops, has been brought into a condition which will enable me in future to follow a regular course of cropping. I do not consider it advisable at present to offer any statement of the accounts, or of the produce of the crops, as I do not consider the results of last year's operations a fair test of the efficiency of our system. However, I hope to be enabled to submit a satisfactory statement of these matters in connexion with my next Report.

The "Agricultural Class" contains twenty-one boys, who receive agricultural instruction for an hour each day from Mr. Geoghegan, the literary teacher, and subsequently work on the farm for three hours. They evince considerable anxiety to acquire agricultural knowledge; and the resolution of the Board of Guardians *not to allow those children to be discharged until they shall be properly instructed*, leads me to anticipate much advantage to the public from the working of the industrial department. When, hereafter, those boys become scattered through the country they will be likely to promote a more improved system of farming than at present exists in this locality.

I have, in conclusion, to express to the Commissioners of National Education, on behalf of the literary teacher and myself, our most grateful thanks for their kind appreciation of our humble efforts, by awarding two gratuities to each of us during the last twelve months.

PATRICK EARDLY, Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Strokestown Union Workhouse Farm.

SUMMARY of the YEAR, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	80	17	1½
„ Paid for Labour,	12	17	1
„ Free Labour of Pupils,		—	
„ Paid for Farm Seeds,	20	7	7
„ „ Manures,		—	
„ „ Cattle,		—	
„ „ Feeding Stuffs,		—	
„ „ Implements and Repairs,	3	16	0
„ „ One year's Rent of Farm,	20	12	8
„ „ „ Poor Rate,		—	
„ „ „ County Cess,		—	
To Profit and Loss for balance, being gain on the year,	163	16	4½
	£302	6	10

Cr.	£	s.	d.
By amount received for Grain,	7	5	0
„ „ Roots, &c.,	118	9	11
„ „ Cattle Sold,	—		
„ „ Dairy Produce,	—		
„ „ Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	176	11	11
	£302	6	10

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Strokestown Union Workhouse Farm.

TABLE showing the CROPPING of the Strokestown Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Potatoes,	4 3 16	April,	October,	About 10 cwt.,	About 380 stone,	4 10 0	4 10 0	—	The Potato crop had to contend with a double failure, a large quantity of the sets having rotted; finding this, I put in turnip seed in the drills, and had about £10 worth of turnips.
Turnips,	3 3 20	June,	December,	4 lbs.,	20 tons,	4 0 0	16 0 0	—	
Onions.*	1 0 10	March and April,	August,	14 lbs.,	47 cwt.,	6 0 0	14 0 0	—	* The Onions were also a failure, as they did not bulb; this I attribute to the long drought in the growing season.
Carrots,	0 0 32	May,	December,	3 lbs.,	8¾ tons,	4 0 0	13 10 0	—	
Parsnips,	0 0 27	March,	January,	3 lbs.,	4 tons,	6 0 0	4 0 0	—	
Vetches,	0 1 10	April,	July and August,	16 stones,	—	2 10 0	10 0 0	—	
Cabbage Plants,	0 1 0	August,	—	8 lbs,	80,000,	5 5 0	14 15 0	—	
Tripoli Onion,	0 0 15	August,	—	5 lbs.,	160,000 plants,	10 0 0	30 0 0	—	
GRAIN.									
Oats,	1 3 0	April,	September,	16 stones,	8½ barrels,	2 0 0	5 10 9	—	
Barley,	0 2 0	May,	September,	10½ stones,	12 barrels,	2 10 0	11 0 0	—	
Flax,	3 0 20	May,	September,	2¼ bushels,	4 cwt. scutched flax, and 10 bushels of saved seed, 4 cwt. tow,	10 0 0	16 0 0	—	
GRASS.									
Clover (second year),	0 2 20	—	August,	—	2 tons,	0 10 0	5 10 0	—	
Total,	17 0 10								
"STOLEN CROPS."									
Cabbages,	1 0 10	May,	In course of being consumed,	2,000 plants,	2,000 heads,	0 2 0	4 0 0	—	These were transplants in the alleys of the onion beds.
Total,	18 0 20								

(Signed), PATRICK EARDLY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

10th March, 1855.

MICHAEL FLYNN, Manager.

Swineford Union Workhouse Farm.

40. SWINEFORD UNION WORKHOUSE AGRICULTURAL SCHOOL, County Mayo.

8th January, 1855.

Agricultural Instruction.—There are at present eighteen pauper boys, all under the age of fifteen years, in the agricultural class, who are divided into two classes, for the purpose of affording each class the opportunity of alternate literary and industrial instruction for three hours each day, as while one class is at school the other class is on the farm, and *vice versa.* This class has been reduced considerably, from the great demand for servants, and the desire evinced by farmers to engage those boys who were initiated here into the practical details of improved farm management, which causes the class to be now as low as eighteen boys.

There being only a few infirm paupers, and no able-bodied, in this workhouse, I was obliged to have the farm cultivated by the school class, assisted by those few infirm men.

As workhouse farms are generally tilled for the production of vegetables for the use of the inmates, the crops sown consisted of Laing's Swede, Aberdeen and Norfolk turnips, onions, carrots, parsnips, potatoes, leeks, and cabbages, with some spring wheat, all of which yielded a fair produce, unless the latter, which was sown by the directions of the Guardians for an experiment, and which yielded badly, the soil being unsuited for its production.

The table annexed to this Report exhibits full particulars of the crops grown on the farm.

JAMES CALLAGHAN, Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Swineford Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	22	14	6
,, Paid for Labour,		—	
,, Free Labour of Pupils,		—	
,, Paid for Farm Seeds,	6	13	1
,, ,, Manures,		—	
,, ,, Cattle,		—	
,, ,, Feeding Stuffs,		—	
,, ,, Implements and Repairs,		—	
,, ,, One year's Rent of Farm,	2	19	2
,, ,, ,, Poor Rate,		—	
,, ,, ,, County Cess,	0	2	0
,, ,, ,, Agriculturist's Salary,	26	0	0
To Profit and Loss for balance, being gain on the year,	44	4	6
	£102	13	3

Cr.	£	s.	d.
By amount received for Grain,	9	0	0
,, ,, Roots, &c.,	33	14	1
,, ,, Cattle Sold,	8	7	2
,, ,, Dairy Produce,		—	
,, ,, Eggs and Poultry,		—	
,, Vegetables consumed in Workhouse,	20	2	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	31	10	0
	£102	13	3

TABLE showing the CROPPING of the Swineford Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips,	2 0 10	May and June,	Nov. and Dec.,	4 lbs.,	18 tons,	Pauper Pupil's Labour—no Charge.	13 0 0	—	Middling Crop.
Parsnips,	0 1 0	April,	November,	7 lbs.,	16 tons,		82 0 0	—	Good Crop.
Carrots,	0 1 0	April,	October,	40 lbs.,	16 tons,		82 0 0	—	Do.
Onions,	0 1 0	March,	November,	8 lbs.,	12 tons,		60 0 0	—	Do.
Leeks,	0 0 10	March,	—	8 lbs.,	Not ascertained,		Not ascertained.		Do.
Cabbages,	0 3 0	February,	—	—	32 tons,		20 1 6	—	Middling Crop.
Potatoes,	0 0 20	February,	September,	12 cwt.,	10 tons,		Not ascertained.		Good Crop.
GRAIN.									
Wheat,	1 2 0	January,	September,	12 stones,	Not ascertained,		Not ascertained.		Sold by Auction in a Stack.
GRASS.									
Clover & Italian Rye-grass,	1 0 0	—	—	—	—		Not ascertained.		Sold by Auction.—Bad Crop.
Total,	6 1 0								
"STOLEN CROPS."									
Winter Vetches,	—	October,	May,	14 stones,	Not ascertained,		Not ascertained.		Middling Crop.
Cabbages,	—	October,	May,	120 stones,	Not ascertained,		Not ascertained.		Good Crop.
Total,									

(Signed), **JAMES CALLAGHAN**, Agriculturist.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

December 31, 1854. **JOHN CARROLL**, Master of Workhouse.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Swineford Union Workhouse Farm.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Thomastown Union Workhouse Farm.

41. THOMASTOWN WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Kilkenny.

January 17, 1855.

Agricultural Instruction.—Of the twenty-eight boys constituting the average attendance in the Agricultural Class, one-half usually worked on the farm, under my superintendence, from nine o'clock each day until four. At first, on taking charge of this place, I found them very unwilling to work; but by degrees they became more tractable and less troublesome, many of them being now tolerably handy in using the spade and shovel. No arrangement had been in operation during the past year for the instruction of the Agricultural Class, within doors, in the theory of agriculture; but it is intended that this department will be better attended to, and show more satisfactory results for the ensuing year.

The farm cannot be said as yet to present any of the characteristics of a "model," as the whole place, when taken up by the Guardians, was in a most neglected state, having been overrun with couch-grass, from the effects of injudicious and excessive grain cropping.

There is no live stock whatever on the farm, nor has there been any provision made for housing cattle on the premises.

The manure is of a very varied nature, being composed of night-soil, weeds, refuse straw, coal-ashes, and sundry other substances interlayered with earth, and saturated at intervals with liquid from the establishment, which makes a very fertilizing manure.

The "permanent improvements" effected on the farm during the year are—the levelling of ditches, filling numerous pitfalls on the face of the farm, and constructing a farm road. There is still much to be done in this way, which will at all seasons require much of the time and attention of the agriculturist.

In conclusion, I have to state that the Guardians have dispensed with my services, and, accordingly, on the 29th of this month I am to give up charge of the farm, which it is proposed shall, in future, be managed by the schoolmaster. The Board was influenced to take this step by the fact, that the number of school-boys and the amount of available pauper labour being so much reduced, the expenses of management would more than counterbalance the returns that might be expected from the agricultural department.

WILLIAM ROCHE, Agriculturist.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Thomastown Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	20	0	0
" Paid for Labour,	10	9	7
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	12	4	3
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	4	11	0
" " One year's Rent of Farm,	30	11	7
" " " Poor Rate,	—		
" " " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	36	1	6
	£113	17	11

Cr.

	£	s.	d.
By amount received for Grain,	—		
" " Roots, &c.,	3	7	11
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By value of Potatoes and Vegetables used in Workhouse,	20	10	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	90	0	0
	£113	17	11

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Thomastown Union Workhouse Farm.

TABLE showing the CROPPING of the Thomastown Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	0 3 13	March,	October,	100 stones,	520 stones,	8 10 0	3 0 0	—	
Mangels,	0 1 27	June,	October,	3½ lbs.,	13 tons,	8 0 0	2 0 0	—	
Turnips,	1 2 27	June and July,	October,	4 lbs.,	10 tons,	2 0 0	4 0 0	—	
Parsnips and carrots,	0 0 30	March,	September,	5 lbs.,	6½ tons,	4 10 0	1 10 0	—	
GRAIN.									
Wheat,	6 2 27	October,	Not yet harvested,	11 stones,	—	3 10 0	—	—	Result will be reported next year.
GRASS.									
Pasture,	13 3 10	Not regularly laid down,	—	—	—	—	—	—	The pasture has been lying in an unprofitable state for the last four years, there having been no seeds sown with the last grain crop grown, which was a third on the same soil, and hence the pasture is both bare and unprofitable.
Total,	23 2 14								
"STOLFS CROPS," &c.									
Cabbage,	0 1 26	From March till July,	December,	2½ feet by 1½ ft.	The crop was value for about £4,	3 10 0	—	—	
Cemetery,	1 0 0	—	—	—	—	—	—	—	
Waste, &c.,	2 1 32	—	—	—	—	—	—	—	
Total,	4 3 18								

(Signed), WILLIAM ROCHE, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

JOHN J. MACCARTAN, Manager.

17th January, 1855.

42. TRALEE POOR LAW UNION AGRICULTURAL NATIONAL SCHOOL, County Kerry.

Tralee Union Workhouse Farm.

January 2, 1855.

Agricultural Instruction.—The Agricultural Class consists of one hundred boys, between ten and fifteen years of age, who receive instructions from the literary teacher in the theoretic principles of agriculture, through the medium of the Agricultural Books supplied by the Board of National Education, during one hour each day, except Saturday.

Industrial Class.—Eighty of the above number work on the farm, under my superintendence, for a period of four hours daily, and thus have an opportunity of seeing theory reduced to practice. It is my pleasing duty to have to observe, that their willingness to assist in the farm operations, their aptitude in learning what I bring under their notice, and their diligence in the execution of the duties allotted to them, are highly satisfactory. The Guardians have kindly granted an augmentation of rations, and also better clothing, to the boys thus employed, which is found to be a most judicious exercise of their benevolence, and productive of the happy results which might have been anticipated. It gives the boys confidence in those who thus prove themselves to be interested in their welfare, and stimulates them to endeavour to co-operate with the persons appointed to superintend their education. On the whole, if this system were extensively adopted by the Poor Law Guardians of this country, I feel convinced the influence on the pauper youths would be productive of beneficial results to the community, by the fresh impulse which might be thus given to the development of the mental and physical energies of those who are destined to bear an active part in the cultivation of our soil, after a few years' training in these establishments.

The farm consists of 23A. 1R. 17P., statute measure, situated adjacent to the Workhouse. The soil is a deep clay loam, resting on an impervious clay subsoil. The rotation adopted is the four-course shift, modified to suit the peculiar circumstances of our position. The Guardians having determined that no cattle should be kept, but the produce of the land sold by auction, it becomes necessary to cultivate more extensively the crops which are most saleable in this neighbourhood.

Manure.—Its preservation and application being a very important consideration in agricultural economy, is attended to with the diligence it requires. The great aim of the workhouse agriculturists should be to prevent the escape of the volatile gases, which abound in their manure heaps, consisting principally of night-soil, soap-lees, &c., mixed with straw, weeds, and other vegetable remains.

The permanent improvement effected during the year consisted chiefly of the trenching or subsoiling of that portion of land which was sown with onions, of which we had an excellent crop.

Agricultural improvement being rather backward in this locality, the neighbouring farmers seem willing to profit by the example which is set before them on our Model Farm, and I always take great pleasure in imparting to them every information in my power whenever they apply to me for such.

CORNELIUS ENRIGHT, Agriculturist.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Tralee Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	29	16	0
„ Paid for Labour,		—	
„ Free Labour of Pupils,		—	
„ Paid for Farm Seeds,	10	11	0
„ „ Manures,		—	
„ „ Cattle,		—	
„ „ Feeding Stuffs,		—	
„ „ Implements and Repairs,		—	
„ „ One year's Rent of Farm,	77	18	3
„ „ „ Poor Rate,		—	
„ „ „ County Cess,		—	
To Profit and Loss for balance, being gain on the year,	168	15	6
	£287	0	9

Cr.	£	s.	d.
By amount received for Grain,	12	19	8
„ „ Roots, &c.,	218	0	1
„ „ Rape,	5	5	0
„ „ Cabbage,	9	4	2
„ Vegetables to Workhouse Officers,	6	12	6
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	34	19	4
	£287	0	9

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Tralee Union Workhouse Farm.

TABLE showing the CROPPING of the Tralee Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Vetches, ...	0 1 34	1st February, . .	—	3 bushels, .	—	—	£160 16s. 4d. on the whole.	—	Eaten by mules and donkeys.
Cabbages, ...	0 3 19	20th February, .	—	—	—	—		—	Sold at different times.
Potatoes, ...	1 2 24	10th March, . .	20th October, . .	75 stones, .	—	—		—	Sold by auction, and cannot be ascertained.
Carrots, ...	0 1 24	29th March, . .	—	7½ lbs., . .	—	—		—	A total failure, and sown with cabbage on the 6th of July.
Parsnips, ...	0 1 24	29th March, . .	—	7½ lbs., . .	—	—		—	
Onions, ...	0 1 24	1st April, . .	2nd October, . .	24 lbs., . .	—	—		—	Sold by auction, and cannot be ascertained.
Mangels, ...	7 3 0	From 24th April to 4th May, . .	From 6th November to 10th December,	3 lbs., . .	20 tons, . .	—		—	
Turnips, ...	8 3 0	10th to 20th May, .	—	8 lbs. at first sowing, .	18 tons, . .	—		—	Had to sow seed three times; used a liquid manure the last time, composed of lime and soot, which had a good effect.
Cabbages, ...	0 0 10	10th August, . .	—	8 lbs.					
Greens, ...	0 0 30	—	10th August.	—					
GRAIN.									
Barley, ...	2 1 28	28th April, . .	1st September, .	12 stones, .	—	—		—	Sold by auction, and cannot be ascertained.
GRASS.									
Total, . .	23 1 17								
"STOLEN CROPS."									
Cabbages, ...	0 2 24	20th July.							

(Signed), CORNELIUS ENRIGHT, Steward.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 5, 1855.

MYLES DALY, Master.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Trim Union Workhouse Farm.

43. TRIM WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Meath.

March 3, 1855.

Agricultural Instruction.—Of an average attendance of forty-nine boys in the Workhouse school, about eighteen receive agricultural instruction on each school-day, from nine till half-past nine o'clock, besides one hour on Saturday for the more advanced boys. It is painful to find the large proportion of the boys who are not qualified for studying agricultural subjects, in consequence of the state of ignorance in which they are found at the period of admission, coupled with the short time some of them remain in the house, owing to the demand of the neighbouring farmers for such as can be recommended by me or the master. It is, therefore, only those who remain here for a considerable time that can avail themselves fully of the educational advantages this institution is capable of conferring. That these boys are fully sensible of the benefits which will hereafter result from acquiring a knowledge of systematic industry, is evident from the readiness with which they engage in the performance of the various duties to be executed on the farm; and I find that by unremitting perseverance they are every day becoming more diligent and desirous to acquire a knowledge of this most important subject.

The farm cultivated by the boys consisted of 2A. 0R. 6P., statute measure; we have, in addition to this, 1R. 20P. of grass ground, but it is not under cultivation, being occupied as a play-ground for the girls, and as a bleach-ground for linen and yarn.

Cropping.—Notwithstanding many disappointments, caused by failure and disease among the crops, the general results of the cultivation, as shown by the balance sheet, may be considered fair. Every attention was paid to the preparation of the soil for the crops, and to the sowing and after-culture; and the Sub-Agricultural Inspector, at his visit in September, seemed much pleased with the appearance of the crops.

From my experience of the past year's operations, I do not hesitate to say that we will, by continued zeal and industry, be able to conduct this department of our duty, not alone to the satisfaction of the Guardians and of the officers of the Board of National Education, but of the public generally. It has already been highly useful to the establishment by promoting the health of the boys, and qualifying them, by their knowledge of agricultural pursuits, to be released from being burthens on the community.

I cannot conclude my observations without calling your attention to the great credit which is due to W. A. Hunter, Esq., Inspector of National Schools, who suggested the utility of introducing this system of agricultural training and instruction for the boys, and afterwards repeatedly visited to witness our proceedings, and assisted us by his advice and experience to carry out our new undertaking.

JOHN MOONE, Schoolmaster and Agriculturist.

. . . .

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Trim Union Workhouse Farm.

Summary of the Year, and Balance Sheet for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	4	0	0
,, Paid for Labour,	—		
,, Free Labour of Pupils,	—		
,, Paid for Farm Seeds,	2	9	6
,, ,, Manures,	—		
,, ,, Cattle,	—		
,, ,, Feeding Stuffs,	—		
,, ,, Implements and Repairs,	0	14	0
,, ,, One year's Rent of Farm,	4	16	6
,, ,, ,, Poor Rate,	—		
,, ,, ,, County Cess,	—		
To Profit and Loss for balance, being gain on the year,	24	13	3½
	£36	13	3½

Cr.	£	s.	d.
By amount received for Grain,	—		
,, ,, Roots, &c.,	16	14	2½
,, ,, Cattle Sold,	—		
,, ,, Dairy Produce,	—		
,, ,, Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	19	19	1
	£36	13	3½

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Trim Union Workhouse Farm.

TABLE showing the CROPPING of the Trim Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Onions,	0 0 16	March 18th,	September 23rd,	18 lbs.,	68 cwt., 6 stones,	—	Not estimated.	—	Not so good as expected, owing to drought after sowing.
Parsnips,	0 2 26	March 25th,	October,	9 lbs.,	6 tns., 12 cwt., 5 st.	—		—	A good crop considering the kind of soil.
Carrots,	0 0 33	April 8th,	October,	7 lbs.,	6 tns., 7 cwt., 7 st.	—		—	A comparative failure; mangels transplanted instead.
Turnips,	0 1 25	May 6th and 13th,	October & November	5 lbs.,	16 tons, 8 cwt.,	—		—	A fair crop, but half cut off by rot.
Mangels,	0 1 37	May 6th,	October,	5 lbs.,	9 tns., 10 cwt., 7 st.	—		—	
Cabbages,	0 0 13	April 15th,	July,	1,500.	—	—		—	
Plants,	0 0 16	March and August,	July and August,	7½ lbs.	—	—		—	
GRAIN.									
GRASS.									
Grass,	0 1 20	—	Not mowed, used as Flax ground.						
Total,	2 1 26								
"STOLEN CROPS."									

(Signed), JOHN MOORE, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

2nd March, 1855.

TERENCE SHERIDAN, Manager.

II. Appendix to Dr. Kirkpatrick's Report.

Tulla Union Workhouse Farm.

44. TULLA WORKHOUSE AGRICULTURAL SCHOOL, County Clare.

January 17th, 1855.

Agricultural Instruction.—The agricultural class consists of thirty boys of the sequels and more advanced classes, between the ages of twelve and fifteen years. They receive instruction in the Agricultural Class Books supplied by the National Board of Education, for half an hour each day, during five days of the week. The above number, together with twenty boys selected from the junior classes, receive practical agricultural instruction on the farm, from eight till nine o'clock in the morning, and from one till three o'clock in the afternoon, that is three hours instruction each day, when the weather permits. The good conduct and diligence of these boys while working on the farm, as contrasted with their former refractory state, affords me great satisfaction. I trust that by unremitted attention to this useful instruction, I will succeed in securing to them the beneficial effects resulting from industrial training.

School Farm.—The farm connected with this workhouse contains five statute acres, of which four and a-half acres are available for culture, the remaining half-acre being a bare rock, is left for the piling of turf, and drying of clothes in the summer and autumn seasons. There has been no systematic rotation of cropping practised here as yet; but henceforth, with the aid of the labour master, I shall endeavour to carry out the three and four-course rotation of green crops, suggested by Mr. Brogan, at his second visit last month. He stated he would recommend me for a gratuity for the improvement of my agricultural class; but I hope when I receive the supply of agricultural books ordered, the progress made will be more satisfactory.

Live Stock.—These consist of a pony, kept for carting out the manure, &c., and six pigs.

Manure.—The night-soil, straw from beds, turnip tops, ashes, and other refuse from the establishment, are the only manures used upon the farm, and the quantity supplied from these sources is quite sufficient.

Permanent Improvements.—The only work of this nature effected here was the formation of a farm road adjoining the establishment, with the drainage of half an acre of the lowest part of the farm; the remaining part under tillage was deeply subsoiled.

Progress of Agricultural Improvement.—As there is no amount of credit due to this farm, as yet, for promoting agricultural improvement, I hope with the combined assistance of the labour master and my own, I will succeed in placing it in a position so as to serve as a model to the surrounding locality, in which there is some improvement in the cultivation of land, and the management of stock.

I beg to acknowledge how much I am indebted to the master of this house for his kind co-operation in promoting the efficiency of this department; and to state that no exertion shall be wanting, either on the part of the labour master, or myself, to realize the intentions of the Board, both as regards the improvement of this farm, and the proper training and instruction of the boys committed to our charge.

JAMES BREEN, Teacher, &c.

[SUMMARY, &c.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Tulla Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	16	3	11½
„ Paid for Labour, Labour Master's Salary included,	11	12	0
„ Free Labour of Pupils,	—		
„ Paid for Farm Seeds,	5	15	2
„ „ Manures,	—		
„ „ Cattle,	25	10	0
„ „ Feeding Stuffs,	4	18	6
„ „ Implements and Repairs,	5	15	2
„ „ One year's Rent of Farm,	3	2	6
„ „ „ Poor Rate,	—		
„ „ „ County Cess,	—		
To Profit and Loss for balance, being gain on the year,	20	18	5½
	£93	15	9

Cr.

	£	s.	d.
By amount received for Grain,	10	2	7
„ „ Roots, &c.,	3	7	4
„ „ Cattle Sold,	30	14	6
„ „ Dairy Produce,	—		
„ „ Eggs and Poultry,	—		
„ Value of Vegetables consumed in Workhouse and Auxiliary,	34	11	4
„ Of Turnips remaining on hands,	15	0	0
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	—		
	£93	15	9

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Tulla Union Workhouse Farm.

TABLE showing the CROPPING of the Tulla Workhouse National School Farm for 1854.

Crops cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
GREEN FALLOW CROPS.									
Turnips,	2 0 0	May,	December,	6 lbs.,	Not ascertained.	Work done by Paupers.	—	—	Fair crop.
Parsnips,	0 0 30	20th March,	November,	5 lbs.,			—	—	Good crop.
Cabbages,	1 0 0	March,	—	—			—	—	
Vetches,	0 0 20	March,	—	—			—	—	
Potato Onions,	0 0 12	—	—	—			—	—	Good crop.
Seed Onions,	0 0 30	—	—	—			—	—	Fair crop.
Leeks,	—	—	—	—			—	—	Leeks were sown with seed onions.
Potatoes,	0 0 26	March,	August,	96 stones.			—	—	
GRAIN.									
Wheat,	0 3 0	December,	September,	16 stones,			—	—	Good crop.
Peas,	0 0 30	March,	September,	16 stones,			—	—	Fair crop.
GRASS.									
Total,	4 2 28								
"STOLEN CROPS."									
Cabbages,	0 3 0	September and Nov.,	Not as yet.	—			—	—	
Total,	0 3 0								

(Signed), JAMES BREEN, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

January 18th, 1855.

JAMES BOLAND, Manager.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Tullamore Union Workhouse Farm.

45. Tullamore Workhouse Agricultural School, King's County.

Agricultural Instruction.—At present our agricultural class consists of fifty-seven boys, who are instructed in the science of agriculture from nine to half-past nine o'clock daily. They cheerfully engage in the performance of the farm operations, and many of them appear to appreciate the opportunity afforded to them here of acquiring that information which may enable them hereafter to become useful members of society.

The Farm, which the Guardians got possession of in December, 1853, contains 6a. 0r. 11p. statute measure, of which 2r. 10p. are taken up by roads and waste, leaving 5a. 2r. 1p. To this may be added 3r. 20p., a portion of the ground originally attached to the workhouse: so the whole of the land available for cultivation last year was 6a. 1r. 21p.

The soil is a good calcareous loam, resting on limestone gravel, and is well adapted for the growth of green crops.

The course of green crop rotation I adopted, as best suited to meet the requirements of the workhouse, (the surplus produce being always sure to meet a ready market here), is as follows:—No. 1, parsnips and carrots; No. 2, mangel and turnips; No. 3, potatoes; No. 4, onions. There are, besides these, eight borders, two bounding each of the principal divisions, on which cabbages, leeks, potatoes, cabbage plants, and turnips were grown last year.

No 1.—I had the manure dug deeply into the ground intended for parsnips and carrots. In March it was formed into ridges five feet wide; holes were made with dibbles, two and a-half feet long, and nine inches in circumference; these holes were filled with a compost, made of the solid contents of cesspools, thoroughly decomposed and mixed with fine earth, the seed deposited on the top of each, and covered and finished with the back of a spade. I regret to have to state that the greater part missed, owing to the drought in spring; what grew were very fine, some measuring two feet four inches long, and weighing nearly four pounds each. The carrots were a complete failure: they were sown similar to the parsnips. The blanks in the parsnip ground, and the whole of the carrot ground were sown in the end of May, and first week in June, with Skirving's and Laing's Swede turnips; a few of the ridges were sown with mangel. They all produced a heavy crop, and brought remunerative prices.

No. 2.—Mangel and Turnips.—This division contains 1a. 0r. 37p. statute, the whole of which I had subsoiled to the depth of two and a-half feet, all stones taken up and removed, many of them some tons weight, and lying only three inches beneath the surface. The third corn crop, in succession, was sown on this ground, but the ravages of the wire-worm destroyed them. It was completely overrun with nearly every variety of weeds, which for years were allowed to ripen their seeds; its former occupant never attempted to disturb them, but after considerable exertion, I got them entirely eradicated. The mangel and turnips were sown in drills twenty-seven inches apart. The seeds were deposited in holes, seven inches asunder, for mangel, and six inches for turnips, the plants in every second hole being removed, the mangel stood at fourteen and the turnips at twelve inches apart. The varieties of mangel sown were the long red, red globe, and orange globe; the long red produced the weightiest crop in this neighbourhood; the other varieties missed: the red globe nearly all. The blanks were supplied with plants taken from the long red, lifted carefully with a ball of earth attached to each; by this plan they suffered nothing by being transplanted. The whole of the mangel sold, by auction, at the rate of £66 3*s.* 5*d.* per Irish acre.

APPENDIX I, II. Appendix to Dr. Kirkpatrick's Report.

Tullamore Union Workhouse Farm.

The varieties of Swede turnips sown were Skirving's improved, Fettercairn's, and the old green top Swede. Skirving's, and Fettercairn's produced a heavy crop. The green-top Swede were all badly formed, and produced a very inferior crop. The digging fork was kept in constant operation between the drills of mangel, turnips, &c., until the meeting of their leaves rendered the further use of this implement impracticable.

No. 3.—Potatoes sown in ridges five feet wide, with eighteen inch alleys.—Varieties sown, were kemps, seedlings, and Scotch Downs. The kemps were sold off early in August, when the ground was prepared, and sown with cabbage seed, which promises to be an excellent crop. The seedlings nearly all missed: the blanks were filled with cabbage plants from the nursery bed. The Scotch Downs produced well, and sold by auction at the rate of £50 10*s.* per Irish acre.

No. 4.—Onions.—The ground for this esculent was deeply dug in January, and in March laid off in ridges, four feet and a-half wide, manure (night-soil, deodorized with peat charcoal) spread evenly, and covered lightly from the alleys, the whole made firm with the back of the spade, seed sown, and covered lightly, and again beaten with the back of the spades. The young plants did not appear above ground until the middle of May, owing to the drought in spring, and consequently prevented the crop coming to maturity at the proper season. Scallions, to the amount of £9 15*s.* 7*d.* were sold. The quantity of saved onions was 200 stones per statute acre.

Manure.—There remains a great deal to be done to ensure the proper collecting and preserving the manure of this establishment. There is a liquid manure tank, and a receptacle for the solid manure being constructed on the farm; when these are completed, all the materials for manure will be removed from the Workhouse, and deposited therein daily, and carefully attended to.

PATRICK FARRELLY, Agricultural Teacher.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Tullamore Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	—		
" Paid for Labour,	8	4	0
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	10	16	2¼
" " Manures,	2	18	6
" " Miscellaneous,	1	4	9
" " Feeding Stuffs,	—		
" " Implements and Repairs,	14	17	6
" " One year's Rent of Farm,	15	0	0
" " " Poor Rate,	1	13	0
" " " County Cess,	0	5	3
To Profit and Loss for balance, being gain on the year,	89	2	0
	£144	1	3

Cr.	£	s.	d.
By amount received for Grain,	—		
" " Roots, &c.,	112	18	11
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	31	2	4
	£144	1	3

TABLE showing the CROPPING of the Tullamore Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Parsnips, ...	0 3 22	Last week in March,	December, . .	6 lbs., . .	3 tons, . .	4 10 9	2 4 3	—	Missed crop; what grew were very fine.
Carrots, ...	0 1 12	First week in April,	—	6 lbs., . .	3¼ cwt, . .	4 8 9	—	4 0 11	Missed entirely.
Mangels, ...	0 2 2	8th and 9th May, .	November, . .	5 lbs., . .	45 tons, 18 cwt.,	6 12 0	31 9 1	—	Very good crop.
Turnips, ...	1 0 14	10th to end of May, .	November, . .	4 lbs., . .	34 tons, . .	6 8 0	15 6 9	—	Good crop.
Potatoes, . . .	1 0 37	March and April, .	July to November, .	13 cwt., . .	4 tns. 12 cwt. 2 qrs.	7 5 1	11 5 0	—	1R. 19P. planted with seedling potatoes missed.
Onions, ...	1 0 2	March, . . .	October, . .	18 lbs., . .	200 stones, .	7 18 9	10 13 1	—	Scallions sold, amounted to £9 16*s.* 11*d.*
Leeks, ...	0 0 19	March, . . .	Not taken up, .	18 lbs., . .	Taken into stock, .	1 0 0	—	—	None of this crop yet used.
Cabbages, . . .	0 0 31	Successionally, .	Successionally, .	4,000, . .	Not ascertained,	4 10 9	11 19 0	—	
Farm road, . . .	0 0 16	—	—	—	—	—	—	—	
Manure tank, . . .	0 0 6	—	—	—	—	—	—	—	
Road, ...	0 2 10	—	—	—	—	—	—	—	The farm is bounded on three sides by roads.
Turnips, . . .	—	—	—	—	—	Sold at,	13 19 6	—	Turnips and mangels were grown where parsnips and carrots missed.
Mangels, . . .							6 5 6	—	
Turnips, . . .	0 3 20	June, . . .	November, . .	6 lbs., . .	Not ascertained,	Sold at,	12 9 6½	—	This ground is inside the Workhouse boundary.
Mangels, . . .									
Total, . .	6 3 31								
"STOLEN CROPS."									
Cabbage Plants, . .	0 1 0	—	—	—	Taken into stock,	1 0 0	—	—	
Cabbages, . . .	0 0 30	—	—	—	Taken into stock,	0 10 0	—	—	
Total, . .	0 1 30								

(Signed), PATRICK FARRELLY, Teacher.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

13th January, 1855.

ROBERT DAVIES, Manager.

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Urlingford Union Workhouse Farm.

46. URLINGFORD WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Kilkenny.

January 13th, 1855.

Agricultural Class.—The agricultural department being but twelve months in connexion with the Board of National Education, and having no works on agriculture till the Commissioners, on the recommendation of their Agricultural Sub-Inspector, awarded a gratuitous stock of agricultural books, could not be expected to make much progress in the theory of agriculture. I am happy to state, however, that Mr. Brogan expressed himself highly pleased at the smartness of the class in the practical knowledge of improved husbandry.

Workhouse Farm.—There has been no regular rotation established as yet, in consequence of the ground being covered with old fences, sand-pits, and houses, all of which after a good deal of labour have been removed, and the entire of the farm is now enclosed by a large boundary wall, and divided into plots to suit a rotation, which will be carefully carried out henceforward, so as to meet the views of your Board as to the *systematic* training of the pauper boys. The crops grown, and their cultivation for the past year, are as follows:—

Parsnips.—The manure was dug into the ground intended for this crop in autumn; the soil was broken down early in March, drills formed eighteen inches apart, and the seed deposited in them the first week in April: produced about ten tons to the acre.

Carrots.—This crop was treated exactly as the parsnip, and returned about twenty tons to the acre.

Onions.—The ground in which this crop was planted, was dug into large drills in autumn, and exposed to the weather during winter, then levelled, and broken fine early in March, and in consequence of the poverty of the ground, an abundant supply of manure was dug into it about four inches in depth. Beds of five feet wide formed the surface, consolidated with spades, to be prepared for the reception of the seed, which was sown on the 24th March, and returned about ten tons to the acre, a portion of which I sold at £8 per ton. The success which attended the small portion I had this year, will induce me to sow at least an acre in the ensuing spring.

In consequence of the limited supply of pauper labour available, horses were employed for the cultivation both of mangels and turnips, the drills for which were opened with a plough, and the seed deposited by hand in the usual way. The mangels were a good crop, but a great portion of them started to seed. The turnips were not as productive as was anticipated.

Flax.—This crop was sown where parsnips were the previous year. The plot was dug early in winter, and broken and raked previous to the seed being sown in beds, formed about nine feet wide, and then lightly covered, care being taken to have all large lumps and stones removed. It did not produce as well as was expected, but it was principally for the information of the boys, and neighbouring farmers that it was sown.

Manure.—I look upon the preservation of manure as one of the principal objects in farming, and the following is the manner in which I preserve it.—The dung heap, to which all the offal of the establishment is collected, is at a distance from the house, and convenient to it is a large cesspool where the beds are emptied, and allowed to remain until properly saturated, whence the straw is removed to the dung heap and carefully mixed. The expenditure of £4 14*s.* 10*d.* under the head of manure purchased, was for peat-mould used in cleaning the privies,

II. Appendix to Dr. Kirkpatrick's Report.

Urlingford Union Workhouse Farm.

which, together with its being a useful addition to the manure, has a deodorizing effect so essential in such cases. There are some gentlemen in this neighbourhood, particularly T. Neville, Esq. D.L., J.P., who often visit the farm, and hear the agricultural class examined, and express their satisfaction on all occasions. The following is a Report of Michael Cahill, Esq., J.P., Ballyconra:—"Was much pleased, indeed, at the great order and general management of the house. The grounds and industrial schools are worthy of imitation, and do great credit to the managers."

I trust my next Report may show more favourable results, and a gratifying amount of progress in this useful system.

PATRICK H. CARDEN, Master and Agriculturist.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	24	15	0
" Paid for Labour,	13	9	8
" Paid for Farm Seeds,	8	19	1
" " Manures,	4	14	10
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	1	9	6
" " One year's Rent of Farm,	10	0	7
" " " Poor Rate,	—		
" " " County Cess,	—		
To Profit and Loss for balance, on account of Pauper Labour, in favour of Union,	139	11	9
	£203	0	5

Cr.	£	s.	d.
By amount received for Grain,	—		
" " Roots, &c., Sold,	55	5	9
" of Vegetables consumed by Paupers, as per Union Books, and Credited to Maintenance Account,	42	16	2
" received for Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	104	18	6
	£203	0	5

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Urlingford Union Workhouse Farm.

TABLE showing the CROPPING of the Urlingford Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of Seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
GREEN FALLOW CROPS.	A. R. P.								
Turnips, ...	2 2 26	May and June, .	November and Dec.,	6 lbs., .	Not estimated: but all, with the exception of turnips, were an average crop.	No account kept of each acre, as the total expense will be seen in the balance sheet.	Profit on each acre not estimated.		
Mangels, ...	1 1 14	1st May, . .	November, . .	7¼ lbs., .					
Parsnips, ...	1 0 8½	6th April, . .	November, . .	6 lbs., .				—	Fair crop.
Carrots, ...	0 1 37¾	28th March, . .	November, . .	5¼ lbs., .				—	A very good crop.
Onions, ...	0 1 13¼	24th March, . .	29th October, .	12 lbs., .				—	Ditto.
Cabbages, ...	0 3 25¼	March and August,	July and December,	Not ascertained,				—	Cabbage used at different times when required for use of House, and also celery, leeks, &c.
Plants, ...	0 0 4¾	April, . . .	—	Not ascertained,					
Potatoes, ...	0 0 38¾	4th March, . .	August, . . .	100 stones,					
Celery, ...	0 0 6½	July and August, .	Still in ground, .	Not ascertained,					
Leeks, ...	0 0 6¼	April, . . .	Still in ground, .	Not ascerta'ned,					
Norfolk Turnips, . .	1 0 2¼	12th July, . .	November, . .	4 lbs., .				—	Sold in November.
Flax, ...	1 0 23¼	12th April, . .	August, . . .	4 to 5 bushels,					
Waste under Grave-yard, .	0 0 25¼								
GRASS.									
GRAIN.									
Total, . . .	9 2 2½								

(Signed), PATRICK H. CARDEN, Master and Agriculturist.

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

18th January, 1855.

LAURENCE J. DEW, Manager.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Westport Union Workhouse Farm.

47. WESTPORT UNION WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Mayo.

January 12, 1855.

Agricultural Instruction.—There are at present twelve boys engaged at agricultural work. Ten of these receive instruction in the "Agricultural Class Book" and "Farmers' Guide" for half an hour each day during five days of the week, and an hour on Saturdays. They work three hours each day in summer, and two in winter, in which they seem to evince great interest. The remainder of their time is occupied in literary studies.

Workhouse Farm.—The portion of ground assigned for the industrial training of the school-boys is 2A. 2R.; and the particulars of the cropping for the past year are shown in the tabulated return appended.

THOMAS M'EVILLY, Teacher and Agriculturist.

[SUMMARY, &c.

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Westport Union Workhouse Farm.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	—		
" Paid for Labour,	—		
" Free Labour of Pupils,	—		
" Paid for Farm Seeds,	3	17	8
" " Manures,	—		
" " Cattle,	—		
" " Feeding Stuffs,	—		
" " Implements and Repairs,	1	5	0
" " One year's Rent of Farm,	7	4	6
" " " Poor Rate,	—		
" " " County Cess,	—		
To Profit and Loss for balance, being gain on the year,	4	5	10
	£16	13	0

Cr.	£	s.	d.
By amount received for Grain,	—		
" " Roots, &c.,	9	18	0
" " Cattle Sold,	—		
" " Dairy Produce,	—		
" " Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	6	15	0
	£16	13	0

APPENDIX I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballymoney Union Workhouse Farm.

48. BALLYMONEY WORKHOUSE AGRICULTURAL NATIONAL SCHOOL, County Antrim.

Agricultural Instruction.—At the commencement of the year there were thirteen boys in the Agricultural Class, and of these eight have gone out as farm-servants. They are engaged for one year, and are each furnished with a suit of clothes; the average wages paid them by the party taking them out being £1 15*s*. Since the formation of the Agricultural Class, a marked difference has taken place in reference to farmers seeking boys in this house. Formerly their services were not required, or they were looked upon as unfitted for any but the most simple offices. Now there is such an anxiety among the farmers to get boys out of the "Agricultural Class," in preference to others, that they even prefer smaller boys who have been trained in the class, and made partially acquainted with the management of cattle, pigs, &c., and the routine and work of a farm. At present there are twelve boys in the class, but they are very small and young, their average ages being eleven years. However, they are regularly instructed in both theoretical and practical farming, so far as their capabilities admit; and all the boys of the school, generally, who are considered capable of benefiting by such, are allowed to take part in the work of the farm.

Cultivation of the Farm.—During the year this has progressed regularly and systematically. The crops, with the exception of the onions, were very good, as will be observed on a reference to the balance sheet. A clear profit of £132 5*s*. 10*d*., being at the rate of £10 per statute acre, realized principally from the labour of the Agricultural Class. I am carrying out the "three-course rotation" on a part of the farm, as recommended by Mr. Brogan.

Live Stock and Dairy Management.—Our live stock at present consists of one horse, four cows, and twelve pigs. The cows are house-fed, and their milk, used by the inmates, is charged at 6*d*. per gallon. From considerable experience, I consider it highly advantageous to keep cows on workhouse farms, as, in the first place, the milk afforded by them is superior to the article supplied by contract; and they afford a means of economizing a quantity of produce, such as cabbage and mangel-leaves, &c., which would otherwise go to loss. Besides, the boys who attend and feed them obtain a practical knowledge of a most important branch of the business of a farm servant.

There is a visible improvement in the cultivation of the land in this locality during the last few years, and I am happy to say that it is increasing every year, the farmers appearing to appreciate more and more the value of a good system of improved cultivation. I have no doubt much of this awakened spirit of improvement is due to the examples of skilful management afforded by the various model and workhouse farms which are in connexion with and supported or encouraged by your Board.

ROBERT BOGLE, Master and Agriculturist.

[SUMMARY, &c.

SUMMARY of the YEAR, and BALANCE SHEET for 1854.

Dr.

	£	s.	d.
To amount of Inventory and Valuation at commencement of year,	165	8	4
,, Paid for Labour,	2	4	7
,, Service of Bull, &c.,	0	11	7
,, Paid for Farm Seeds,	8	19	0
,, ,, Manures,	1	1	8
,, ,, Cattle,	48	1	0
,, ,, Feeding Stuffs,	23	16	4
,, ,, Implements and Repairs,	2	16	6
,, ,, One year's Rent of Farm,	31	7	10
,, ,, ,, Poor Rate,	0	12	6
,, ,, ,, County Cess,	2	12	1
To Profit and Loss for balance, being gain on the year,	122	16	1
	£410	7	6

Cr.

	£	s.	d.
By amount received for Grain,	12	1	1
,, ,, Roots, &c.,	81	14	5
,, ,, Cattle Sold,	126	1	9
,, ,, Dairy Produce,	59	10	3
,, ,, Eggs and Poultry,	—		
By Inventory and Valuation taken at close of the year, inclusive of proportion of permanent unexhausted improvements,	131	0	0
	£410	7	6

Appendix I.

II. Appendix to Dr. Kirkpatrick's Report.

Ballymoney Union Workhouse Farm.

Table showing the Cropping of the Ballymoney Workhouse National School Farm for 1854.

Crops Cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting	Quantity of Seed per statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	
Green Fallow Crops.	A. R. P.					£ s. d.	£ s. d.	£ s. d.	
Potatoes,	2 0 32	February and March,	August to November,	12 cwt.,	85 cwt.,	8 12 0	2 10 0	—	
Mangels,	2 1 8	1st to 15th May,	1st December,	4 lbs.,	22 tons,	7 10 0	8 10 0	—	
Turnips,	1 0 0	May and June,	December,	4 lbs.,	20 tons,	7 10 0	7 10 0	—	
Onions,	0 3 0	1st April,	September,	10 lbs.,	85 cwt.,	11 0 0	20 0 0	—	This crop was not good, owing to bad seed.
Cabbages,	1 0 0	March,	June to December,	4,840 plants,	36 tons,	8 0 0	12 0 0	—	
Grain.									
Oats,	2 0 13	1st April,	1st September,	8 stones,	209 stones,	4 10 0	8 15 0	—	
Wheat,	0 1 0	November,	1st September,	6 stones,	180 stones,	4 15 0	5 0 0	—	
Barley,	0 1 0	10th April,	26th August,	6 stones,	Not ascertained,	4 10 0	—	—	
Rye,	0 1 0	March,	17th September,	8 stones,	Not ascertained,	4 10 0	—	—	
Grass.									
Vetches,	1 0 0	1st April to 1st June,	July,	2¾ bushels,	15 tons,	4 5 0	—	—	
Italian Rye-grass,	2 0 0	1st April,	June and July,	2 bushels,	Cut for soiling and hay,	3 16 0	—	—	
Total,	13 0 13								
"Stolen Crops."									
Turnips,	1 0 0	4th July,	January,	4 lbs.,	18 tons,	4 7 6	9 0 0	—	After hay.
Rape,	0 2 28	July,	April and May,	5 lbs.,	Not known,	—	—	—	After potatoes.
Mangel,	0 3 0	12th July,	December,	Plants,	12 tons,	5 0 0	8 0 0	—	After vetches.
Early Cabbage,	0 1 10	1st November,	May and June,	Plants,	22 tons,	5 10 0	8 5 0	—	Before turnips.
Cabbage plants,	0 1 0	10th August,	—	4 lbs.,	Not known,	—	—	—	After vetches.
Total,	2 3 38								

I certify that the foregoing Returns and Accounts are correct, according to the best of my knowledge and belief.

(Signed),

2nd February, 1855.

R. Boole, Manager.

Appendix I.

III. Analyses of Soils.

III.—ANALYSES of the SOILS of some of the MODEL FARMS in connexion with the BOARD OF NATIONAL EDUCATION IN IRELAND, showing their MECHANICAL and CHEMICAL CONSTITUTION, as ascertained by JOHN F. HODGES, Esq., M.D., Professor of Agriculture in Queen's College, Belfast, &c.

Name of Model Farm.	Soil Analysed.	Mechanical Composition.			Chemical Composition.					
		Clay and fine Sand.	Coarse Sand.	Total.	Potash.	Soda.	Carbonate of Lime.	Carbonate of Magnesia.	Alumina.	Peroxide of Iron.
Glasnevin,	Surface soil,	33·19	66·81	100·0	0·380	–	2·711	0·315	1·201	3·642
	Subsoil,	30·82	69·18	100·0	0·060	0·19	31·56	0·25	1·67	2·71
Markethill,	Surface soil,	30·0	70·0	100·0	–	–	0·26	0·40	4·93	4·62
	Subsoil,	–	–	–	–	–	0·01	trace,	–	10·86
Larne,	Surface soil,	41·0	59·0	100·0	–	–	1·82	0·48	4·46	10·36
	Subsoil,	–	–	–	–	–	1·30	0·09	5·60	9·45
Kyle Park,	Surface soil,	–	–	–	Soluble salts of potash and soda,	0·23	0·27	0·38	0·75	1·63
	Subsoil,	36·21	63·79	100·0						
Farraby,	Surface soil,	22·75	77·25	100·0	0·07	–	0·43	0·09	5·65	2·15
	Subsoil,	25·31	74·69	100·0	0·04	–	–	–	–	3·73
Dunmanway,	Surface soil,	10·97	89·03	100·00	Soluble salts of potash and soda,	0·64	0·12	0·03	1·34	6·18
	Subsoil,	15·00	85·00	100·00	0·18	–	0·67	0·19	2·17	5·60

Chemical Composition—*continued.*								Description.	Soil Analysed.	Name of Model Farm.
Chloride of Sodium.	Sulphate of Lime.	Phosphoric Acid.	Organic Matter.		Insoluble Siliceous Matters.	Total.	Water in Sample.			
			Soluble.	Insoluble.						
0·077	0·338	0·130	0·257	11·845	78·101	99·036	3·757	Loam,	Surface soil,	Glasnevin.
0·08	–	0·03	both,	3·06	60·13	99·74	2·000	Calcareous loam,	Subsoil,	
–	–	–	both,	12·41	78·10	100·72	28·40	Sandy loam,	Surface soil,	Markethill.
–	–	–	both,	1·73	86·46	99·06	19·10	—	Subsoil,	
–	–	0·10	both,	12·79	68·35	98·36	20·00	Loam,	Surface soil,	Larne.
–	–	trace,	both,	9·39	73·31	99·14	22·95	—	Subsoil,	
–	0·15	0·06	both,	1·89	94·28	99·64	6·10	Loam,	Subsoil,	Kyle Park.
0·56	0·12	0·07	both,	3·24	88·25	100·63	1·76	Sandy loam,	Surface soil,	Farraby.
0·15	0·14	trace,	both,	3·01	91·41	100·56	1·54	Sandy loam,	Subsoil,	
–	Sulphuric acid. 0·03	0·03	both,	11·24	80·05	99·65	3·00	Sandy loam,	Surface soil,	Dunmanway.
0·63	0·03	0·01	both,	7·40	83·53	100·42	3·20	Sandy loam,	Subsoil,	

APPENDIX I.

IV. Circular.—Forms of Annual Returns

IV.—CIRCULAR.—ANNUAL REPORTS AND RETURNS OF "STATISTICS AND CROPPING" OF THE NATIONAL AGRICULTURAL SCHOOLS.

Education Office, Marlborough-street, Dublin,
185 .

SIR,—We are directed to request that your Report for the year on the Agricultural department of the Agricultural National School, together with the Returns of "Statistics and Cropping," of which blank forms are herewith sent, may be forwarded to this office before the end of the first week in January next.

It is requested that your Report may be drawn up with great care, in a simple and perspicuous style, avoiding all topics not strictly pertaining to your department, and briefly explaining, under the several heads herein set forth, the leading features of your system of management, and any peculiarities that may distinguish your practice from that usually followed.

It is also requested that the particulars required to be furnished in the returns, may be ascertained with the *greatest possible accuracy*, the object in view in requiring such details being, not only to ascertain the progress made and results obtained in each *individual* case, but to exhibit a *tabular statement* of the results realized in *different localities*, with *different soils*, and under *different circumstances*. Such a statement, if carefully compiled from *correct data*, may be found useful in many respects, and will form a valuable addition to our agricultural and educational statistics; but, on the contrary, if erroneous or exaggerated, it will be positively mischievous, and only tend to bring discredit on the parties furnishing such, and on the system they are engaged in carrying out.

To obviate the necessity of forwarding the Farm Account Book, for the purpose of checking the accuracy of the statements in your report, you are requested to furnish an abstract of your accounts, on the form supplied for that purpose, and to have the same examined and certified by the Manager previous to its transmission.

It is considered desirable, for the sake of facility of reference, that some uniform arrangement should be adopted and adhered to in the publication of these reports, and you will, therefore, submit your observations, on the several matters pertaining to the agricultural department, in the following order:—

I.—AGRICULTURAL INSTRUCTION.

1. Agricultural Boarders, 2. Agricultural Class, 3. Industrial Class,	State the increase or decrease in each class as compared with the previous year; and the attention to study, and proficiency acquired by the members of each.

II.—MODEL FARM.

State the degree of success which has attended your labours on it during the last year, and any peculiarities in your mode of cultivation, or in the results arising therefrom, which you may consider it useful and instructive to set forth.

III.—LIVE STOCK AND DAIRY MANAGEMENT.

IV.—MANURES.

How collected, preserved, and applied.

If portable or special manures were required, state the kinds, the crops to which they were applied, the quantity per acre, and the comparative results.

V. Permanent improvement effected during the year.

VI.—Progress of agricultural improvement in your locality, and to what extent it has been influenced and promoted by the beneficial example of improved management afforded on your model farm, &c.

VII.—Concluding observations and suggestions.

We are, sir, your obedient servants,

MAURICE CROSS, } Secretaries.
JAMES KELLY, }

To

____

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APPENDIX I.

IV. Circular.—Forms of Annual Returns

(RETURN No. 1.)

Statistics of the ______ Agricultural National School and Model Farm, County ______ 31st December, 185 .

Extent.	Rent or Value per Statute Acre.	Cost of Cultivation.					Return from Cultivation.		
		Amount paid for Labour.	Estimated Value of the Gratuitous Labour of the Pupils.	Cost of Seeds, Manures, &c.	Rent and Taxes.	Total.	Estimated Value of the Produce raised.	Profit or Loss on the Farming transactions of the Year.	Comparative acreable (Statute) Profit or Loss.

(Continued.)

Live Stock.								Rotation or Rotations followed.	Pupils receiving Agricultural Instruction.				"Industrial Class."		
Draught Animals.	Black Cattle.				Sheep.	Pigs.	Poultry.		Agricultural Boarders.			Day Pupils.	Number paid by the Commissioners.	Number paid by the Patron or Teacher.	
	Bulls or Bullocks.	Cows.	Heifers.	Calves.					Free.	Pay half.	Pay full amount.			Patron.	Teacher.

(Return No. 2.)

Table showing the Cropping of the____________________National School Farm, for 185 .

Crops cultivated.	Extent Occupied.	Period of Sowing or Planting.	Period of Harvesting.	Quantity of seed per Statute Acre.	Produce per Statute Acre.	Expense of Cultivation per Acre.	Result of Cultivation.		Observations.
							Profit.	Loss.	

(Signed,)____________________Teacher.

I certify that the above Returns are correct, according to the best of my knowledge and belief,

____________________Manager.

____________________Date.

V. Prospectus of the Model Agricultural National Schools.

V.—PROSPECTUS OF THE MODEL AGRICULTURAL SCHOOLS.

The object of these Institutions is, besides affording Agricultural Instruction to the more advanced pupils attending the Literary Schools, and setting an example of skilful cultivation to the farmers in their neighbourhood, to educate and train a class of young men destined for agricultural professions, as Agricultural Teachers, Agriculturists, and Land Stewards. With this view accommodation has been provided at each for a certain number of resident Agricultural Pupils, or "Boarders," of whom one is always to be a *free* pupil selected and recommended by the Agricultural Inspector, the others being *paying* pupils.

The persons selected to fill these Agricultural Scholarships must be not less than FIFTEEN years of age, of good moral character, sound physical constitution, and fair literary acquirements. Pupils of National Schools obtain a preference.

They are dieted, lodged and have their washing done in the establishment; and will receive literary instruction from the Schoolmaster, and a course of lectures on Agricultural Science from the Agriculturist, besides practical instruction on the Model Farm, in all the operations of which they will be required to assist.

The course of instruction comprises:—

In the Literary Department—Reading; Writing; Grammar, including English Composition; Geography; History; and Arithmetic, Book-keeping, the elements of Geometry, and Algebra, especially in their relation to Agriculture.

In the Agricultural Department—Drainage; tillage by manual and horse labour, with the description and use of the different implements necessary; rotation of crops; preparation of the soil for, time and mode of sowing, after-culture, harvesting and economizing the different crops cultivated; the best modes of collecting and preserving manures, with the nature and utility of stimulants and special manures, the crops to which they should be applied, at what time, and in what quantity; the breeding, rearing, house-feeding, and general management of the different kinds of live stock; and the mode of keeping farm accounts.

While inmates of the Establishment they will be required to conform to its rules, and they will be constantly under the charge of a vigilant and intelligent superintendent, who will strictly enforce order and discipline, and enjoin the observance of all moral and religious duties.

When the course of study in these Establishments is completed, those who have distinguished themselves by their good conduct and proficiency will have an opportunity of being sent to the principal Establishment at Glasnevin, there to complete their course of training free of any further expense.

In order to place the opportunity of receiving such useful and valuable instruction within the reach of the humble class for whom it is chiefly designed, the Commissioners have fixed the amount to be charged to each pupil at the following low rate:—

For District Model Agricultural Schools,	£8
For Model Agricultural Schools, . .	6

Payable quarterly in advance, as directed in the summons; the Commissioners themselves contributing a sum, which, along with the above charge, is adequate to maintain those boarders according to a plain but substantial scale—(see the annexed "Dietary Table.")

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* For further information regarding these schools, such as the "aid" afforded by the Commissioners, &c., see "Rules and Regulations of the Commissioners," which may be had on application.

RESIDENT AGRICULTURAL PUPILS' TIME-TABLE.

	H. M.		H. M.	
At	5 0 A.M.			Rise.
From	5 0	to	5 30	Dress and make up Beds.
„	5 30	to	5 45	Prayers.
„	5 45	to	6 30	Feed and Clean Stock, Clean Yard, &c.
„	6 30	to	7 0	Wash and prepare for Study.
„	7 0	to	8 45	Study Agricultural Subjects, and attend the Lecture or Examination of the Agriculturist.
„	8 45	to	9 0	Prepare for Breakfast.
„	9 0	to	9 30	Breakfast.
„	9 30	to	2 0 P.M.	Feed Stock and Work on the Farm.
„	2 0	to	3 0	Dinner.
„	3 0	to	6 0	Feed Stock and Work on the Farm.
„	6 0	to	6 30	Prepare for Study.
„	6 30	to	8 0	Study Literary subjects under the superintendence of the Literary Teacher.
„	8 0	to	8 30	Supper.
„	8 30	to	9 15	Feed Stock and arrange every thing for the night.
„	9 15	to	9 30	Prayers.
At	9 30	.	.	Prepare for Bed.
At	9 45	.	.	Extinguish lights in Dormitory.

The above is designed for the *Summer* half year; during the Winter months the hours for rising, meals, labour, and instruction, must be regulated according to the season.

DIETARY for RESIDENT AGRICULTURAL PUPILS.

Days.	Breakfast.	Dinner.	Supper.
SUNDAY, .	Bread ¾lb.; Butter, 1 oz.; Tea, 1 pint.	Bread, ¾lb. Beef, boiled or stewed, ¾lb., and Vegetables.*	Oatmeal, ⅜lb. in Stirabout, and Skim Milk, 1 pint.
MONDAY, .	Do., and Sweetmilk, 1 pint.	Do., and Bacon, ¼lb. boiled with Vegetables.	Do.
TUESDAY, .	Do. do.	Do., Butter, 1 oz.; Eggs, 2.	Do.
WEDNESDAY,	Do. do.	Do., Soup, 1 pint, and Vegetables.	Do.
THURSDAY, .	Do. do.	Do., Bacon, ¼lb, and 2 eggs fried.	Do.
FRIDAY, .	Do. Butter, 1 oz., and Coffee, 1 pint.	Do., Fish, 1lb., or Milk, 1 pint, and Butter, 1 oz.	Do.
SATURDAY, .	Do. Sweetmilk, 1 pint.	Do., Soup, 1 pint, and Vegetables.	Do.

* Potatoes, when available, can be substituted occasionally for the Bread at Dinner.

MAURICE CROSS, } Secretaries.
JAMES KELLY,

Education Office, Marlborough-street,
April, 1852.

VI. Directions for obtaining Aid to Ordinary Agricultural Schools.

VI.—MEANS to be adopted for obtaining AID towards the establishment of an AGRICULTURAL DEPARTMENT in connexion with a NATIONAL SCHOOL where local circumstances may be favourable for the combining of Agricultural with Literary instruction.

As much uncertainty is found to exist as to the proper course to be taken in order to obtain a grant towards the establishment of an *agricultural department* in connexion with a National School, and as many applications have had to be rejected in consequence of the necessary conditions not being complied with, the following directions are published for the future guidance of parties desirous of having *agricultural* instruction introduced into National Schools under their management:—

Wherever a farm of land of not less than *three statute acres* in extent, is connected with a National School, and at a distance not exceeding *half a mile* from it, aid will be granted to the agricultural department on the following conditions:

1st.—That an "*Agricultural Class*" of at least *ten* of the more advanced boys shall receive *theoretical* instruction in the school, and *practical* instruction on the farm, during a specified time each day.

2nd.—That the farm connected with the school shall be efficiently cultivated, according to some approved and *regular system* of *rotation*, so as to serve as a *Model* to the pupils and the surrounding neighbourhood.

3rd.—That the "*house-feeding of cattle,*" and the *careful collection* and *skilful application* of *manure*, form characteristic features in the system of farm management.

When it has been determined to make application for aid, the manager should write to the "Secretaries, Education Office," notifying his desire to have agricultural instruction introduced into the school. He will then be furnished with the proper form of application, which he is to fill up and transmit to the Office. Directions will then be given to the Agricultural Inspector to visit at the earliest opportunity; *but, in the mean time, active steps should be taken in organizing the agricultural department, for unless it shall be in an efficient state of operation when the Agricultural Inspector visits, his report must be unfavourable, and the application must consequently be rejected.* If, on the other hand, an agricultural class has been formed, and is found to be progressing favourably in agricultural knowledge, and that the farm shall appear skilfully and carefully cultivated, the report must be favourable, and the grant of agricultural salary will date from the first of the month in which the application was received (if up before the 15th), *no matter what interval may elapse between the date of its being forwarded and the period of the Agricultural Inspector's visit.*

For further information regarding these schools, such as the aid afforded by the Commissioners, see "Rules and Regulations of the Commissioners," which may be had on application.

MAURICE CROSS, } Secretaries.
JAMES KELLY, }

Education Office, Marlborough-street, Dublin.

VII.—PROSPECTUS of the ALBERT NATIONAL AGRICULTURAL TRAINING INSTITUTION, GLASNEVIN, DUBLIN.

VII. Prospectus of the Model Agricultural National Schools.

Patrons.—The COMMISSIONERS of NATIONAL EDUCATION in IRELAND.

Superintendent.—THOMAS KIRKPATRICK, Esq., M.D., Agricultural Inspector.

LECTURERS.

Animal Physiology and Pathology.—JOHN F. HODGES, Esq., M.D., Professor, Queen's College. Belfast.

Botany and Vegetable Physiology.—D. MOORE, Esq., M.R.I.A., A.L.S., and Curator, Royal Botanic Gardens, Glasnevin.

Chemistry and Geology.—W. K. SULLIVAN, Esq., Ph.D., Professor and Chemist, Museum of Irish Industry.

Practical Agriculture.—Mr. BALDWIN.

Horticulture.—Mr. CAMPBELL.

Objects.—This Institution, which was established by the Commissioners of National Education in Ireland in the year 1838, is designed to supply such instruction both in the *science* and *practice* of agriculture, as will qualify young men for discharging the important duties of teachers of agriculture, land stewards, farmers, &c., &c.

The Farm.—The farm, which is situated about three miles north of Dublin, and lies between the public roads leading to Santry and Swords, contains 180 statute acres. With a view of exemplifying the most approved systems of culture, various rotations of cropping are followed upon separate divisions of the farm. The system of house-feeding cattle is pursued both summer and winter. The arrangements for affording to the pupils as large an amount of information as possible upon every branch of the business of farming, including dairy husbandry, the fattening of cattle, the breeding and rearing of different kinds of live stock, the various operations of field culture, and the permanent improvement of the soil, are such as to place within their reach an opportunity of becoming acquainted with the practical details of every department of agriculture.

The Training Institution.—The Training Institution is situated on the farm. The new buildings (which were completed in 1853,) comprise dormitories, dining hall, lecture and school-room for seventy-five resident pupils; museum, library, and laboratory; a comprehensive range of farm-offices, and apartments for the superintendent, matron, land steward, second literary teacher, and servants.

Management.—The chief supervision of the Institution devolves upon the superintendent. The agriculturist, who resides on the farm, and is assisted by an efficient land steward, carries out the practical working of the farm under the direction of the superintendent. The literary instruction of the pupils is conducted by two competent teachers; and a gardener of practical experience has charge of the horticultural department.

Instruction.—The course of instruction imparted by the literary teachers embraces all the branches which constitute a sound English education; namely, English grammar and composition, arithmetic, book-keeping, and mathematics, including land surveying, levelling, and mapping.

Each of the lecturers of the Institution delivers two sessional courses of lectures annually. By these lectures, which are illustrated by means of numerous and carefully executed diagrams; valuable collections of minerals, plants, &c., and chemical apparatus, an opportunity is afforded the pupils to acquire a thorough knowledge of the principles of their profession.

In order that the pupils may become fully acquainted with improved practical husbandry they are called upon to take part in the performance of every farm operation—the feeding and management of live stock.

APPENDIX I.

VII. Prospectus of the Model Agricultural Schools.

They are made practically acquainted with the most recent application of steam power to agricultural purposes, and also with the uses of a very select collection of farm implements.

A certificate, founded on the reports of the lecturers and officers, will be granted to each pupil by the superintendent, at the termination of his period of training, provided his conduct and proficiency warrant it.

Admission.—Two classes are admitted to the Institution. The first consists of two divisions, one of which is composed of young men who intend to become land stewards or farmers, and who are boarded, lodged, and educated at the public expense.

A pupil is admitted into this division by application to the Secretaries, on the following conditions, viz. :—

1. That he has acquired fair literary attainments either at one of the minor National Agricultural Schools, or at an elementary National School.

2. That he has attained the age of seventeen years, is of sound constitution, and free from disease.

3. That he produces satisfactory certificates of character, as regards his *industrial* habits, *sobriety*, and *general morality*.

The period of training is two years.

The second division of this class consists of literary teachers who are qualifying themselves for conducting agricultural schools.

The members of this division are also boarded, &c., gratuitously; and are admitted on the following conditions :—

That they have been previously trained in the literary department; and are able to produce similar satisfactory testimonials of character, &c., as those required on the part of the first division.

The period of training in this division only extends to one year.

The *second class* is composed of young men who board and lodge at their own expense, in the immediate neighbourhood of the farm.

The members of this class are admitted upon the following terms :—

1. That they engage in the ordinary farm work.

2. That they attend punctually, with the intern pupils, all the lectures delivered at the Institution.

3. That they be amenable to all its rules and regulations.

4. That each pays an entrance fee of two guineas to the Commissioners, which is appropriated to the purchase of agricultural books for the library of the Institution.

No specified time is set apart for the training of "pupils" of this class.

General Rules and Regulations to be observed by Pupils.

1. To pay prompt obedience to the orders of all the officers.

2. To attend punctually to all duties as laid down in "time table;" and to make no unnecessary noise within the building.

3. To appear in becoming apparel, and to cultivate habits of cleanliness and neatness. To wear slippers always within doors, and "school" coats when at study, and never to wear them out of doors.

4. Smoking and the use of spirituous liquors are strictly prohibited.

5. Not to suffer any garment, book, implement, or other article, to lie about in a slovenly or irregular manner.

6. The expense of repairing or replacing any article belonging to the Institution, injured or mislaid through the carelessness of any pupil, must be borne by him.

7. To observe a respectful, kind, and gentle demeanour in their intercourse with each other.

8. Not to enter the culinary department without permission. Undue

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VII. Prospectus of the Model Agricultural National Schools.

intercourse with parties in the neighbourhood is not allowed; and intimacy with the servants of the Institution is prohibited.

9. It is not permitted to become a member of any political society, nor to take part at any meeting of a sectarian character. Newspapers, books, and periodicals, of a political or polemical character, are prohibited; also discussions on these subjects.

10. Neglect of attendance at Divine Worship on Sunday, and other days set apart for religious duty, will be looked on as a serious offence; and pupils are expected to pay strict attention to their respective clergymen, and otherwise attend to their religious duties.

11. No pupil is to wear or injure any article the property of another.

12. Nor to leave the premises on any occasion without permission.

13. *Out-door labour.*—Both classes are to engage in all descriptions of farm labour; to exhibit anxiety and zeal in performing same; to take due care of implements, &c., and are liable to be called on for extra work at any busy season of the year.

14. *Yard officers*—are appointed in their turn to feed, clean, and otherwise attend to the live stock, and to keep the farm yard and offices clean and neat. They are to be assisted by the entire class each morning and night, Sundays and holidays excepted.

15. *Stable.*—Each pupil is called upon in his turn to take charge of a horse, which he is to clean and litter, under the direction of the ploughman.

General Time Table of the Albert Institution.

The entire class is divided into two divisions, A and B, which are so employed, on alternate days that while class A is at work, class B is at study, and *vice versa.*

SUMMER HALF-YEAR.

Time.	Employment of Class A, during one day.	Employment of Class B, during the same day.
H. M.		
At 5 0 A.M.	Rise.	Same as Class A.
From 5 0 to 5 30	Dress and say prayers.	,, ,,
5 30 ,, 6 0	Feed and clean stock, work in yard and on farm.	,, ,,
6 0 ,, 6 30	Wash, dress, and prepare for study.	,, ,,
6 30 ,, 8 0	Study in school-room.	,, ,,
8 0 ,, 9 0	Attend lecture.	,, ,,
9 0 ,, 9 30	Breakfast.	,, ,,
9 30 ,, 10 0	Prepare for study.	Prepare for work.
10 0 ,, 2 0 P.M.	Literary instruction.	Work on farm.
2 0 P.M. 3 0	Dinner.	Same as Class A.
3 0 ,, 6 0	Literary instruction.	Work on farm.
6 0 ,, 6 30	Relaxation.	Prepare for study.
6 30 ,, 8 30	Study in school-room.	Same as Class A.
8 30 ,, 9 0	Supper.	,, ,,
9 0 ,, 9 30	Feed and clean stock.	,, ,,
9 30 ,, 10 15	Enter dormitories; devotional exercises; prepare for bed.	,, ,,
10 15 —	Lights extinguished in dormitories	,, ,,

N.B.—In winter the pupils rise at 6 o'clock and work till twilight.

By order of the Board,

Maurice Cross,
James Kelly, } Secretaries.

Office of National Education,
Dublin, July, 1855.

APPENDIX K.

Page

Report on Examination in "**Knowledge of Common Things**," held in **Belfast**, in the **Year** 1854, for the **Award** of **Dr. Sullivan's Premiums**, by **William M'Creedy**, Esq., Head Inspector; with **Appendix**, ... 617

APPENDIX K.

Appendix K.

Report on Examination in "Knowledge of common things," by Wm. M'Creedy, Esq.

Report on Examination in "Knowledge of Common Things," held in Belfast, in the year 1854, for the Award of Dr. Sullivan's Premiums, by William M'Creedy, Esq., Head Inspector.

"Man is approaching a more complete fulfilment of that great and sacred mission which he has to perform in this world. His reason being created after the image of God, he has to use it to discover the laws by which the Almighty governs his creation; and by making these laws his standard of action, to conquer nature to his use—himself a divine instrument."*—*Speech of Prince Albert at the London Mansion House, March* 21, 1850.

Gentlemen—Having been named by the Commissioners, on the recommendation of my friend Dr. Sullivan, to hold the first examination—that of the year 1854—for the award of the premiums offered by him to the teachers of the counties of Antrim and Down for the best answering in the "Knowledge of common things," and which, accordingly, I held in Belfast in the month of December last, I beg to submit the following brief report on the details of that examination.

After having determined on the particular subjects of examination, and the terms, &c., on which parties would be admitted to compete for the prizes, my first care, of course, was to give publicity to the scheme among the teachers concerned, and so to afford opportunity to such of them as might think themselves possessed of the requisite knowledge to come forward. This I did by the circulation of the following paper, drawn up and issued in the month of September, 1854 :—

Notice to Teachers of the Counties of Down and Antrim, regarding Dr. Sullivan's Scheme of Premiums for the best answerers in the "Knowledge of common things."

1. Origin and object of the scheme.

"Education Office, 20th February, 1854.

"Gentlemen—In the month of November last I requested you to intimate to the Board, that, if it would not be considered irregular, I would feel great pleasure in placing funds to the amount of £20 per annum in their hands, to be given in premiums to the teachers of National Schools in the counties of Down and Antrim, who should be found by our Inspectors, at the general examination held each year in Belfast, to be best acquainted with '*the knowledge of common things*.'

"At the same time I stated that the Dean of Hereford (who has done so much to promote popular education in England, and, above all, to make it *practical* and *utilitarian* in its objects) intended to offer similar premiums to the teachers of elementary schools in the county of Hereford. In fact, the idea—and I consider it a happy one—originated with the Dean, and I am merely following the good example which he has set; and I feel great pleasure at being able to add, that several persons of influence and consideration are also following his example—among others, Lord Ashburton, whose admirable speech on the subject you must have read. In fact, this speech far exceeds in value even the munificent prizes offered by his lordship.

"To return to the subject of my letter. As you informed me that the Board would feel great pleasure in having my premiums distributed by their officers in the way which I had proposed, I now beg to enclose the sum of

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* "God hath framed the mind of man as a mirror or glass, capable of the image of the universal world, and joyful to receive the impression thereof, as the eye joyeth to receive the light; and not only delighted in beholding the variety of things and vicissitudes of times, but raised also to find out and discern the ordinances and decrees which throughout all these changes are infallibly observed."—*Bacon.*

APPENDIX K.

Report on Examination in "Knowledge of common things," by Wm. M'Creedy, Esq.

£20 for the present year; and for the next, and each succeeding year, the same amount for the same purpose will be permanently provided by me. Perhaps I should mention that I have *personal* reasons for limiting my premiums to the counties of Down and Antrim. But even if I had not, I would, in order to make them of some value, confine them to a particular county or district; and it is to be hoped that many other persons will follow the example of the Dean of Hereford, and that similar premiums will soon be offered to the national teachers in every county in Ireland.

"As it is my wish that the whole matter should be left in the hands of the Inspectors who conduct the annual general examinations in Belfast, I will take no part in it, except to suggest that my friend, Mr. M'Creedy (Head Inspector), be requested to draw up a set of examination questions for the *present year*, and to make the necessary arrangements.

"I am, Gentlemen, your obedient servant,

"ROBERT SULLIVAN.

"To the Secretaries."

"P.S.—The useful information contained in the school-books published by the Board, will probably form the principal part of the examination for the present year; and as I consider the education of girls of equal, and, indeed, of *greater importance* than that of boys, I will suggest to Mr. M'Creedy to divide the premiums equally between the male and female teachers. In addition to an examination in the national school-books, the female teachers should be asked some questions in domestic economy. Some questions should also be taken from Dean Dawes' 'Suggestive Hints.'"

"Education Office, 28th February, 1854.

"SIR—We have laid before the Commissioners of National Education, your letter of the 20th instant, proposing to place funds at their disposal, to the amount of £20 per annum, to be given as premiums to the teachers of National Schools in the counties of Down and Antrim, who should be found at the general examination held each year in Belfast, to be best acquainted with 'the knowledge of common things.' In reply, we are directed to convey to you the best thanks of the Commissioners for your very liberal offer, which they very willingly accept, especially as it will tend, in their opinion, to promote an object of which they cordially approve.

"The Commissioners will at once give the necessary instructions to carry into effect your wishes; and they direct us to inform you that they intend to call public attention to the subject of your letter in the body of their next Report.

"We are, Sir, your obedient servants,

"MAURICE CROSS, } Secretaries.
"JAMES KELLY, }

"Robert Sullivan, Esq., LL.D.,
Training Department."

2. The point chosen for the place of examination this year is Belfast; and the time (the particular days to be hereafter notified), the second week in December.

3. The examination of the males and females will be distinct and apart; two days will be given to those of each sex, and the examination will be both oral and written.

4. The candidates admissible must fulfil the following conditions:—

1st.—That they have been at least two full consecutive years, up to the time of offering themselves, and immediately preceding it, in the service of the Board; and that during that time no fine shall have been imposed, or official reprimand or admonition addressed to them, for misconduct or neglect of duty.

2nd.—That they have been examined and classed, and occupy no lower grade in the service than the first division of 3rd class.

3rd.—That they be teachers of schools with an average daily attendance of at least thirty pupils.

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4th—That they be teachers whose schools have been favourably reported on, not only as regards the observance of *neatness*, *order*, and *cleanliness*, in all their arrangements, and as regards likewise the teaching of the ordinary branches of instruction—as reading, writing, grammar, geography, arithmetic, and writing from dictation, but, above all, as regards the thorough grounding of their pupils, in "the knowledge of common things," contained in the Board's Lesson Books; and that in addition, in the case of female candidates, they be limited to those in whose schools plain sewing and other branches of needlework are well and carefully taught to the pupils.

5th—That they have the sanction of the District Inspector to offer themselves for the premiums.

5. For this year the examination is to be confined to the lessons on "common things" spread over the several Lesson Books of the Board, particularly those on the following subjects, or those akin to them:—

Manufactures,
Art,
Commerce,
Agriculture,
Money Matters,
Natural History,
Animal and Vegetable Life,
The Mineral Kingdom,
Animal and Vegetable Physiology,
The Elements of Mechanics and of Natural Philosophy,
Domestic Economy,

LESSON BOOKS.

Book II.
Sequel I.
„ *II.*
Book III.
„ *IV.*
Supplement.
Book V.
Girls' Book V.
Agricultural Class Book.

And to the lessons on like subjects found in Dean Dawes' "Suggestive Hints on Secular Instruction."

NOTE.—The females to be exempted from examination on Mechanics and Natural Philosophy, and on all those parts also of the Agricultural Class Book not relating to "Domestic Management."

6. The sum of £20, proposed for distribution by Dr. Sullivan, will be awarded as follows:—

	Males.	Females.
1st Premium,	£5	£5
2nd „	3	3
3rd „	2	2

7. The candidates are to be limited for each district to five of each sex; and as there are six districts concerned, the highest number that can offer for examination is thirty males and thirty females, so that there will be a premium for every ten competitors at least.

8. Their travelling expenses, on the usual scale of allowance, will be awarded to all such competitors as shall acquit themselves at all satisfactorily.

9. Those teachers who wish to offer themselves for examination as competitors for these premiums, must notify such their wish to the Inspector of their district before the 18th day of November next.

10. Subsequently, Mr. M'Creedy will notify to the several candidates selected by the District Inspectors the particulars of the times and place of meeting for examination.

Education Office, Dublin, September, 1854.

Acting on this invitation, twenty-six male and sixteen female teachers offered themselves as candidates, and these I afterwards summoned to meet me in Belfast, the first to undergo examination on the 7th and 8th of December, and the second on the 11th and 12th following.

I give here the names of the parties, with their schools, class, periods of service, &c.:—

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MALES.

County.	Name.	School.	Age of Teacher.	Class.	Term of Service.
					Years.
Antrim,	Thomas Johnston, .	Portrush, No. 2, .	19	II.^{2}	2
"	Mann Harbison, .	Carnbeg, . .	24	I.^{3}	8
"	Henry Speers, .	Dunminning, .	37	II ^{2}	11
"	John Ferguson, .	Ballytibbert, .	29	II.^{1}	8
"	John Brown, .	Guy's Free, .	26	I.^{2}	10
"	Robert M'Kinstry,	Ballinashee, .	31	II.^{1}	8
"	James Watson, .	Ahoghill, . .	28	II.^{1}	4½
"	Alex. Thomson, .	Islandbawn, .	32	II.^{1}	13½
"	Andrew Porter, .	Galgorm, . .	25	III.^{1}	2¾
"	Hugh F. Percy, .	Whitehouse, .	28	II.^{1}	13
"	Daniel M'Kee, .	Seaman's Friend Society, . .	38	I.^{2}	12
"	John Stevenson, .	Carrickfergus, .	28	I.^{3}	10
"	Patk. Mulholland, .	Lisburn, . .	27	II.^{1}	6
Down,	John M'Ilduff, .	Finnis, . .	29	II.^{1}	8
"	Henry Dymond, .	Grange, . .	44	I.^{2}	13
"	Samuel Wallace .	Gilford Mills, .	36	I.^{1}	14
"	John Robinson, .	Mt. Panther, .	22	II.^{1}	5
"	George Phœnix, .	Ballylough, .	33	II.^{2}	10
"	Thomas Bryars, .	Ballynagarrick, .	31	I.^{3}	14
"	Robert Gamble, .	Carnew, . .	26	II.^{1}	6
"	Robert Finlay, .	Ballykeel, Ednagonnell, . .	53	I ^{2}	18
"	Joseph Lowry, .	Saintfield, .	37	II.^{1}	7
"	Robert Martin, .	Tullywest, .	26	II.^{1}	7
"	John M'Conkey, .	Ballyeasboro', .	39	I.^{3}	8
"	John Bell, . .	Downpatrick, .	44	I.^{3}	9
"	Robert Irvine, .	Ballee, . .	42	I.^{1}	22

FEMALES.

County.	Name.	School.	Age of Teacher.	Class.	Term of Service.
Antrim,	Anne M'Quillan, .	Antrim, . .	20	I.^{3}	4½
"	Eliza Kane, . .	Cushendall, .	22	2^2	5¾
"	Mary Anne Quin, .	Carnlough, .	25	3^1	4
"	Cathn. Mulholland,	Lisburn, . .	25	I.^{1}	8
"	Eliza Orr, . .	Whitehouse, .	28	3^1	7
"	Margaret Beggs, .	Ballymena Industrial,	28	2^1	11
"	Eliza M'Ferran, .	Carrickfergus, .	32	2^1	6
Down,	Anne Murphy, .	Magheralin, .	16	3^1	2
"	Anne Starkie, .	Ballydock F. .	27	1^1	12
"	Eliza J. Devlin, .	Ballygowan, .	28	2^2	13
"	Mary Bell, . .	Downpatrick F. .	21	1^3	4
"	Esther Bell, . .	Downpatrick Inft.	19	2^1	3½
"	Anne Rafferty, .	High-st., Newry,	30	1^3	9
"	Mary Doyle, .	Clonuff, . .	21	2^1	3
"	Margaret Boyle, .	Portaferry, .	35	1^1	9
"	Susan Irvine, .	Ballee Fem. .	28	1^1	7

As stated in the foregoing circular, the examination was in part written, and in part oral; the first three hours, from ten to one o'clock of each day, being given to the former, and from two to five o'clock each afternoon to the latter.

The nature of the written examination may be judged of by the questions which are printed in the Appendix; but of the oral, want of space forbids me from submitting the same sure and simple means of judging, and I can no otherwise describe it than by saying that it embraced a full, searching, and minute inquiry into all those parts of the

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Board's series of school-books which at all treat of that large and miscellaneous class of subjects falling under the head of "common things." The men had twenty rounds of questions addressed to them, or 520 in all; and the women, who were fewer in number, and whose written exercises were shorter, had not less than thirty-five rounds of questions put to them on those parts of the same course which it was thought more peculiarly incumbent on them to know.

The general answering in both kinds, and by both sexes, was excellent, and evinced a most respectable acquaintance with the various subjects touched upon. None exhibited any thing like a reproachful degree of ignorance or unpreparedness; and of those even who fell short of the prizes, many acquitted themselves in a highly creditable manner; while the successful competitors again displayed such a compass of knowledge, and expressed themselves, especially in their written exercises, with such accuracy and precision, not to say elegance of language, as surprised fully as much as it gratified me.

The names of the successful candidates, with the prizes awarded them, were as follows:—

Males.			Females.		
1st Premium,	Robert Irvine, .	£5	1st Premium,	Cath. Mulholland,	£5
2nd ,,	John Browne, .	3	2nd ,,	Susan Irvine, .	3
3rd ,,	Mann Harbison, .	2	3rd ,,	Mary Bell, .	2

On the whole, the results of this examination were most satisfactory and promising, and such, I firmly believe, as would fully justify the Commissioners in following the example thus set them, and so honourably for himself, by one of their oldest and most distinguished officers, by taking up and adopting for themselves the experiment, and extending it to a much wider sphere of action.

Much good, I think, might be effected by such a course, in stimulating our teachers, in the first place, to study themselves the subjects here in question; and in the next, to teach them more extensively and uniformly to their pupils. Our books,* I need hardly say, afford them even now abundant materials for such teaching; and it only requires, on their part, a little patient and sustained application in their perusal to master their contents, and so to fairly qualify them for the task of instruction.

One thing, however, our teachers must ever bear in mind—that whatever *facts*, whether of art or nature, they communicate, they are to communicate in connexion with the knowledge of the *law* which governs them, or the *principle* from which they spring, as by such teaching alone can acquaintance with the facts themselves be rendered lastingly interesting, or ever in any high degree useful. For, without a knowledge to some extent of the laws which serve to explain, or intelligibly connect, their relations of co-existence or of sequence, the facts or phenomena of nature, like the characters of a strange Cipher to one who has not the key, have no instructive interest for the observer; and, however much they may excite his fear, wonder, or surprise, serve rather to bewilder than rightly to inform his intellect. Facts in themselves, and isolatedly viewed, are dead things; it is only when united with principles they become living and productive. As has been finely said: facts, which, consigned to the minds of the unintelligent, are like seeds in a granary, unquickened and inert, imparted to those of informed and cultivated understanding, are like the same seeds when committed to a prepared and congenial soil, where they

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* Alluding to those books, the *English Journal of Education* observes, that "the admirable chapters on Political Economy in the Third and Fourth Books, have not been equalled by any production of the recent 'Common Things' movement."—*See No. for December*, 1854.

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spring up into luxuriant vegetation, and bear useful fruit. "Do not," says Dean Dawes, in his excellent tract on the mode of teaching common things, "attempt to explain any common thing, until the children understand the law; and if you would have your lessons to be effective, be sure you perfectly understand the subject you are about to teach. In this part of your teaching, as in arithmetic and every other thing, let principles, be understood before you attempt to lay down rules, and then the children will understand the grounds on which the rules are based. You must bear in mind it is the office of all such educational helps as have been brought before you in this* exhibition, 'to teach men to think, not to save them the trouble of thinking.' In this way I believe a vast amount of information might be imparted in our elementary schools, which would lead the children to take a great interest in what they are learning, and which would give a practical turn to their minds that no other kind of teaching could give. But I would have every teacher to bear this in mind, that it is better to teach a few things well, than a great many ill."

And to the same effect the Rev. M. Moseley:—"That," says he, "which is valuable in this kind of teaching is not, I apprehend, the knowledge of the 'common things' professed to be taught, but the *science* of them."

"What is chiefly to be desired," says Mr. Bowstead, like Mr. Moseley, one of her Majesty's Inspectors of Schools for Great Britain, "is, that this department of school-work should be handled more systematically, that the details of ordinary processes should always be accompanied by clear and simple explanations of the principles which govern them, and that teachers should aim not so much to store the mind with facts as to communicate to their pupils a power of reasoning upon and analyzing the phenomena around them."

Thus taught, the importance of such knowledge for all classes of the community can hardly be overrated; for by such a course of instruction our youth, when grown up and entered upon the world, would be fitted not only to view with intelligence the greater glories of creation, but to look with interest on the varied phenomena of social intercourse, *the things that before us lie in daily life*, to know which, as Milton has it, "is the prime wisdom;" and be prepared, too, as another equally great poet has expressed it—when in their daily walks, whether meant for harmless pleasure or healthful recreation—to find

"Tongues in trees, books in the running brooks,
Sermons in stones, and good in every thing."

And might we not further hope that, with their minds thoroughly imbued by such studies, and their perceptions thus made *quick to recognise the moral properties and scope of things*—to discover in every part of Nature's works, the meanest as well as the highest, the traces of law, and order, and wise and beneficent design—they would, not seldom, mount up in thought to Him—"the first Fair, first Perfect, and first Good"—whose bosom is the primal seat of law,† and the everlasting source of wisdom, harmony, and goodness; so that, in their case, as ever, Science would prove to be the handmaid of Religion! ‡

As to the future arrangements to be adopted in connexion with the

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* Educational Exhibition of the Society of Arts, 1854.

† "Of law there can be no less acknowledged than that her seat is the bosom of God, her voice the harmony of the world; all things in heaven and earth do her homage—the very least, as feeling her care, and the greatest, as not exempted from her power. Both angels and men, and creatures of what condition soever, though each in different sort and manner, yet all with uniform consent, admiring her as the mother of their peace and joy."—*Hooker.*

‡ As bearing on this subject, I cannot here forbear quoting, from the greatest

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award of Dr. Sullivan's premiums, I would propose, inasmuch as the examination over which I presided was attended with an amount of expense quite incommensurate with the value of the prizes competed for, that the candidates should be limited hereafter to a much smaller number—say nine of each sex; and that these should be taken, in alternate years, from the two counties of Antrim and Down.

I would further propose that no male or female teacher, who had once taken a first prize, should be allowed again to compete until after an interval of four years.

In conclusion, I have to observe that, with the view of interesting those to whom such inquiries may be new, I have given in the Appendix, in addition to the questions proposed by myself for the written part of the examination on which I now report, those submitted in England for the first award of the Ashburton prizes, together with the most instructive speech of Lord Ashburton himself, when first propounding his scheme; and some extracts also from other distinguished men, who, at various times, and with a special reference most of them to the very points now in question before the public, and here but slightly touched upon, have discussed the question of popular education.

I remain, Gentlemen, your obedient servant,
WILLIAM M'CREEDY, Head Inspector.

Dublin, November, 1855.

of our modern poets, the following noble lines on the union of knowledge with religion:—

"Trust me that, for the instructed, time will come
When they shall meet no object but may teach
Some acceptable lesson to their minds
Of human suffering or of human joy.
So shall they learn, while all things speak of Man,
Their duties from all forms; and general laws,
And local accidents, shall tend alike
To rouse, to urge; and, with the will, confer
The ability to spread the blessings wide
Of true philanthropy. The light of love
Not failing, perseverance from their steps
Departing not, for them shall be confirmed
The glorious habit by which Sense is made
Subservient still to moral purposes,
Auxiliar to divine. That change shall clothe
The naked Spirit, ceasing to deplore
The burthen of existence. Science then
Shall be a precious Visitant; and then,
And only then, be worthy of her name.
For then her Heart shall kindle; her dull Eye,
Dull and inanimate, no more shall hang
Chained to its object in brute slavery;
But taught, with patient interest, to watch
The processes of things, and serve the cause
Of order and distinctness, not for this
Shall it forget that its most noble use,
Its most illustrious province, must be found
In furnishing clear guidance, a support,
Not treacherous to the Mind's *excursive* Power.
—So build we up the Being that we are;
Thus deeply drinking-in the Soul of Things,
We shall be wise perforce; and while inspired
By choice, and conscious that the Will is free,
Unswerving shall we move, as if impelled
By strict necessity, along the path
Of order and of good. Whate'er we see,
Whate'er we feel, by agency direct
Or indirect, shall tend to feed and nurse
Our faculties, shall fix in calmer seats
Of moral strength, and raise to loftier heights
Of love divine, our intellectual soul."—*Wordsworth.*

APPENDIX A.

DOCTOR SULLIVAN'S PREMIUMS, 1854.—SCHOOLMASTERS.

FIRST DAY.—*Three hours allowed for this paper. Three Questions to be answered out of each Section, and others, as time may permit.*

SECTION I.

1. Name and define what are called the general properties of bodies.

2. Name and describe the several mechanical powers.

3. Explain what is meant by the specific gravity of bodies, and show how it is estimated.

4. What is meant by the centre of gravity of a body? Show how the centre of gravity of an irregular block of wood may be found.

5. Distinguish between the terms *heat* and *caloric*; enumerate the several ways in which the latter is produced, and explain the difference between *latent heat* and *free caloric.*

SECTION II.

1. What is meant, *technically* taken, by the term *value*? Enumerate and explain the constituents or elements of value, and show, by examples, that the possession of the union of all these, and not of one or two alone, is necessary to an object to constitute it an *article of value.*

2. What is meant by *division of labour*? Show how such an arrangement naturally arises in the progress of society, and enumerate its several advantages, and, if you suppose it to have any, its disadvantages.

3. Are improvements in machinery, by which a few men are enabled to do the work of many, in the end, and judged by their total results, beneficial or otherwise to the working classes? If beneficial, show why, and illustrate by examples.

4. What is the nature of the connexion between high rents and high prices?
   - *a.* Show that the high price of agricultural produce is not caused by high rents.
   - *b.* Show that the abolition of all rent would not necessarily tend to cheapen agricultural produce.

5. Define *taxes*, and explain what it is the subject receives in exchange.
   - *a.* Show in what respect the payment of a tax is like any other legitimate exchange or payment.
   - *b.* Show in what *two* respects it differs from other exchanges, and explain why it should do so.
   - *c.* Show that, generally speaking, and under almost any form of government, what the people receive in return for the tax is, on the whole, a fair equivalent.

SECTION III.

1. Explain the principle of the barometer, and the uses to which it is applied.

2. How is the formation and deposition of dew accounted for?
   - *a.* Why more copious in summer than in winter?
   - *b.* Why more copious on clear than on cloudy nights?
   - *c.* Why not deposited equally on grass and gravel, on broken and on unbroken ground?

3. To what height can water, ordinarily speaking, be raised by the common suction pump? Explain its mode of action, and illustrate the principle by reference to other kindred phenomena.

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4. How many sorts of levers are there? Describe the relative positions of the *weight, power*, and *fulcrum* in each, and give familiar examples of each.

5. Give examples of the various contrivances employed to increase and to lessen friction.

6. How are porous bodies affected by the absorption of moisture? To what practical account has the knowledge of this fact been turned in some parts of France?

SECTION IV.

1. What are the organs of respiration in man and the higher order of animals? Describe them, and explain their functions.
   - *a.* Describe the peculiarities of the respiratory system in birds.
   - *b.* Also in Fishes.

2. Explain the composition of the atmosphere, and describe its several uses.

3. What is meant by the conduction of heat? Give familiar examples of good and bad conductors; and illustrate the value of the knowledge of such phenomena by reference to the arts and life.

4. Explain the formation of clouds and rain.

5. What are the necessary requisites of a correct balance?

6. Why will a glass sometimes break by pouring hot water into it?

7. Why will a heated body, if suddenly cooled by pouring cold water on it, sometimes crack? How has the knowledge of this fact been sometimes applied for the economy of labour?

SECOND DAY.—*Three hours allowed for this paper. Three questions to be answered out of each section, and others, as time may permit.*

SECTION I.

1. Define what is meant by *wages*, and say on what the *rate* of wages naturally depends.
   - *a.* Show that it does not rise and fall, as some suppose, with the price of provisions.
   - *b.* Show that any attempt on the part of the Legislature to determine this rate must be inexpedient and inoperative, whether the aim be, first, to fix it *higher*, or, second, to fix it *lower* than that which it would be the interest of employers to offer, or which the circumstances of the *labour market* would alone render legitimate.
   - *c.* Again, supposing the Legislature would concede, not alone to one or a few classes of workmen, which would be manifestly partial and unjust, but to all, which would alone be fair and equal, the right of fixing each their own rates of wages, and of enforcing their payment, show how the labourer, who is not only a *seller* of labour, but, almost invariably to a like extent, a *purchaser* of labour, would, in this latter capacity, be affected by such legislation?
   - *d.* Enumerate the causes which go to explain the inequality of wages in different employments; in other words, explain why, at the same time and in the same place, all workmen do not receive the same wages.

2. How is capital divided? Characterize the two kinds, and enumerate the things which, in the case of a farmer, for instance, fall under each respectively.

3. The interest of the corn dealer is supposed by many to be opposed

to the public interest; now, take the two cases following, and state what you think the just inference on this point:—

1st. Suppose a corn dealer who, in anticipation of a scarcity, may have made large purchases of provisions, to have been deceived in his expectations, who are the parties to suffer most by his miscalculation?

2nd. Suppose, on the contrary, that he has not miscalculated, and that he has been right in his anticipation, who are the parties to be benefited?

4. In what way is security of property necessary to the growth of wealth?

a. Show that *inequality* of fortunes must *necessarily* arise with security of property.

b. Show that the robbery of the rich, and the equal distribution of their wealth among the poor, would not prove beneficial to a people.

c. Show that, however he may live, every man, rich or poor, spends his income, whatever it may be, or allows somebody else to spend it for him; and that the less he spends on himself, the more remains for others.

SECTION II.

1. Describe the structure of the eye in man, its humours, coats, &c., and explain how it adapts itself to different degrees of light, and the varying distances of objects.

a. Explain the offices of the eye-brows, eye-lids, and eye-lashes.

b. Explain the defects of short-sightedness and its opposite, and the remedies for each.

2. Describe the structure and action of the heart, and the course of the blood through the arterial and venous systems.

a. Note the difference of office between the auricles and ventricles.

b. Note the difference of office, structure, and position of the veins and arteries.

c. Note the difference between the arterial and venous blood.

d. Note the difference of the pulmonary and the general circulation.

e. Note when, by whom, and by *what steps*, the discovery of the circulation of the blood was made.

3. What is the distinction between *animate* and *inanimate* bodies?

4. State, with examples under each, the *five* important points, as mentioned in the Fifth Book, in which the vital principle appears to counteract the laws of general physics.

5. Explain the several steps or processes through which the food of ruminants ordinarily passes before its conversion into *chyle*; and state whether there is ever any departure from this order. Note the peculiarity of structure in the stomachs of the lama and camel.

SECTION III.

1. Of what substances do soils chiefly consist?

a. How are soils named?

b. What is meant by heavy lands?

c. How may such be rendered lighter?

2. What are the four things necessary to the healthy growth of plants? Illustrate your answer by examples.

3. What are the processes to which, after enclosure, and before cropping, it may be desirable to subject the land?

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a. Explain what lands most need draining.
b. Enumerate in their order the several advantages of draining.
c. Explain the difference between subsoiling and trenching, and point out what is the most appropriate season for this latter operation.

4. What are the various modes by which plants are propagated?

5. On what principle is the *rotation of crops* founded?

6. What is the *two-fold* division of manures mentioned in the "Agricultural Class Book?" Enumerate those which would fall under each respectively.
a. What other three-fold division of manures has been made?
b. What other *two-fold* division is made?
c. Of the last, which is the more neglected?

SCHOOLMISTRESSES.

FIRST DAY.—*Three Hours allowed for this Paper. Three Questions to be answered out of each Section, and others, as time may permit.*

SECTION I.

1. Describe the two chief defects of sight, and explain how they are remedied.

2. Describe the process of digestion, and the course of the food from its mastication until its conversion into chyle.
a. Note by what agency mastication is aided.
b. By what contrivance the food is prevented in its passage from the mouth to the gullet, from entering the larynx.
c. Offices of the crop and gizzard in birds.
d. What is observed of the crop in birds of the dove kind?

3. Describe the structure of the teeth in man, distinguishing the *temporary* from the *permanent*, and noting the number and divisions of each set. What are the advantages of cleaning the teeth daily?

4. State the marks of design in the structure of birds, and in the human spine.

5. Enumerate the differences between birds and beasts, as given in Sequel, No. 2.

SECTION II.

1. Describe the processes gone through in the manufacture of pins, as given in the Second and Third Book of Lessons.

2. Describe the processes gone through in the manufacture of ordinary sewing needles, as given in the Girls' Reading Book.

3. Give the substance of the lesson on the prognostics of the weather, as explained in the Supplement to the Fourth Book. Write out also as many of Dr. Jenner's "Lines on the Signs of Rain," given in our Second Book, as you can recollect.

4. What are the general properties of metals? Write down in order, one under the other, the names of all metals treated of in our Fourth Book, and note some of the distinguishing qualities of each.

5. Why is the presence of flowers and living plants in a bed-room during the night thought injurious?

6. Write out the substance of the lesson on "Bread," given in the Girls' Book.

SECTION III.

1. Give a few examples to show how economy in the use of the raw materials tends to cheapen the chief manufactured product.

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2. Why have kettles and tea-pots wooden handles?

3. Enumerate the capitalists and labourers whose capital and labour have contributed to form the cotton gown you ordinarily wear.

4. Name the countries from which we derive our chief supplies of the following commodities, viz.:—tea, coffee, rice, sugar, spices, pearls, cotton, tobacco, rum, brandy, iron, hides, timber, fruit, port wine, sherry, claret, mahogany, and other hard woods, flax, hemp, and tallow.

5. Explain why it is that, in this country, ground which has a south-western aspect is preferred to that which has a north-eastern?

6. Write out the substance of the extract from Addison, on the "Results of Commerce," as given in the Girls' Book.

SECOND DAY.—*Three Hours allowed for this Paper. Three Questions to be answered out of each Section, and others, as time may permit.*

SECTION I.

1. Of what country is the sugar-cane a native, and when and by whom was its cultivation first made known to Europeans? Describe the process of the manufacture of sugar.

2. Where is the nutmeg tree to be found? Describe the fruit, and mention the uses of its several parts.

3. Between what parallels of latitude is tea cultivated? Describe the plant, and how it is cultivated; when its leaves are plucked and how; and in what way they are prepared for the market.

a. By whom first introduced into Europe? }
b. Into England?

4. In what way would you instruct your pupils to distinguish the four cardinal points of the heavens?

5. From what is paper manufactured? Describe the several processes through which it passes until it reaches the hands of the consumer?

SECTION II.

1. Mention the parts of plants essential to their growth, perfection, and propagation.

2. What are the various means provided by nature for the preservation of the seeds of plants, as described in our Fifth Book? What are the means provided for their dispersion?

3. Why is attention to the right ventilation of our apartments of such essential importance? Enumerate some of the ways in which the air of our dwelling rooms may become vitiated, and say in what way it may be purified.

4. When a female discovers her dress to be on fire, what should she do?

5. Enumerate briefly, as given in the Supplement to the Fourth Book, the things to be attended to, and the rules to be observed, by those who wait upon the sick.

APPENDIX B.

ASHBURTON PRIZES, 1854.—SCHOOLMASTERS.

MORNING.—*Three Hours allowed for this Paper. Two Questions to be answered out of each Section, and others, as time may permit.*

SECTION I.

1. Define the following words and phrases, and illustrate your meaning by their usage in matters of social life:—skill, industry, economy and forethought, wealth, money, value, price, labourers and employers of labour, capital and capitalist.

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2. What is the usual consequence of an abundant or deficient harvest upon the price of food? and upon the wages of labour.

3. What is meant by division of labour? and show the importance of this in advancing the wealth and well-being of a nation.

4. What are the principal conditions of industrial success among the labouring classes, and what kind of training in early life is most likely to lead to it?

5. What are the necessary qualities of the food of a people, in order that the supply may be permanent? and how do foods for man and beast vary in this respect?

6. What metals are the most useful? Mention the particular properties which make them so; and give the outline of a lesson on iron or lead; and its uses, from the state of ore up to a knife-blade or sheet-lead.

SECTION II.

1. Point out the different ways in which the air in a dwelling-room is rendered impure, and the best way of ventilating the room.

2. What are the best materials for building a cottage; the necessary conditions of health, with reference to the building; and which is preferable, a slated or thatched roof; and why?

3. What vegetables are usually cultivated in a garden? Which do you consider the most nutritious? and why? What rotation of crops would you recommend in a garden of one rood in extent?

4. What is the difference between porous and retentive soils, and how would you treat them? Explain the principle on which soils pulverize after frost, and the advantages of this.

5. Explain what is meant by a proper rotation of crops—by exhausting and non-exhausting plants, How would you ascertain what substances plants draw from the soil? and, having done this, how would you manure the land?

SECTION III.

1. What are the essential properties of matter? Define and explain some of them.

2. Explain what is meant by the attractions of cohesion and gravitation, and exemplify by giving instances of each.

3. Give Newton's three laws of motion, and illustrate the last by experiment.

4. What is meant by centripetal and centrifugal forces? and show how, in different latitudes, the weight of bodies is affected by the latter.

5. A body let fall from the top of a tower is three seconds before it reaches the ground; how far did it fall in each second? and what was the height of the tower? If the action of gravity ceased at this point, how far would it fall in the next three seconds?

SECTION IV.

1. To which of the mechanical powers do the following implements belong:—a spade and fork in digging, the plough, the saw, the axe, a pair of scissors, a pump handle, the screw? Give your reasons in each case.

2. Explain the principle of a pair of scales, and of a common steelyard.

3. Explain the principle of the wheel and axle, and show how it is applied in raising up water from a well.

4. Show the use of the plumb-line, the square, and the spirit-level, to the bricklayer and carpenter.

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AFTERNOON.—*Three hours allowed for this Paper. Two Questions to be answered out of each Section, and others, as time may permit.*

SECTION I.

1. What are the principal bones of the human skeleton? How are they kept together at the joints; and of what substances are they composed?

2. Explain the construction of the spine, or of the hand, and the mechanical contrivances for the different movements which they are intended to perform.

3. How would you judge of the habits and food of animals from their jaws and teeth? Illustrate your answer by examples.

4. What are muscles and tendons, and their uses in the animal frame? And in the movement of one bone against the other in the joints, how is it they are not worn away?

5. What is the cause of a defect in vision in what are called short-sighted and long-sighted persons, and what kind of glasses are required to correct it in each? What are the purposes of the eyelids and eye-lashes?

6. Point out any differences in the eyes and ears of animals which show adaptation to their respective wants.

SECTION II.

1. What is the difference between an artery and a vein, between arterial and venous blood; and why is the cutting or rupture of an artery more dangerous than a vein?

2. Give your reasons for thinking that exercise is necessary, and generally beneficial to all the animal functions.

3. What is meant by respiration? Explain how the chest expands and contracts in this process? And in what does the air breathed out from the lungs differ from common atmosphere air? What experiment would show this?

4. Does the blood undergo any, and what change in circulating through the body? And explain the functions of the heart, arteries, and veins in this circulation.

5. What are the properties of milk as a food, and the substances it contains? Is it equally good at all periods of life?

6. What analogy is there between the blood of animals and the sap of vegetables? In each case mention as many substances as you can for forming which they must contain the materials?

SECTION III.

1. What are the constituent parts of the atmosphere? How are they combined, and in what way are they subservient to the wants of animal and vegetable life?

2. What is meant by the specific gravity of bodies; and under what conditions is water taken as the standard? How would you ascertain the specific gravity of substances heavier and lighter than water?

3. Explain the principle and construction of the common barometer; when the mercury stands at 28·7 inches, at what altitude would the water stand in a water barometer?

4. Describe a common suction pump or syphon; and explain the principle of their action?

5. A vessel will float on water whose specific gravity is 1, with a burden of 200 tons: what weight of cargo would it carry if floated on sea water whose specific gravity is 1·035—or on mercury?

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SECTION IV.

1. What is meant by the terms "warm" and "cold;" and why do not all substances of the same temperature feel equally so when touched?

2. What is the general effect which heat has upon matter; and what are the different ways in which solid and fluid bodies are heated?

3. What are the phenomena attending the melting of ice, and heating the water till it boils away in steam?

4. Explain how dew is formed, and its effects on vegetable life. Why does it not fall equally on grass and gravel?

5. What is meant by the number of inches of rain which fall during the year at any particular place; and how is this ascertained?

6. What is meant by the solvent power of water? Enumerate the substances you know to be solvent in it. How does it affect the growth of plants and animals?

SCHOOLMISTRESSES.

MORNING.—*Three hours allowed for this Paper. Two Questions to be answered out of each Section, and others, as time may permit.*

SECTION I.

1. Define the following words:—skill—industry—economy and forethought—wealth—money—and illustrate your answer by their application in matters of social life.

2. What are the principal conditions of industrial success among the labouring classes, and what kind of training in early life is most likely to lead to it?

3. What are the advantages of paying ready money in your dealings, and the disadvantages of the contrary practice?

4. What are the advantages of clothing clubs for the labouring classes, and how ought they to be conducted?

SECTION II.

1. What are the necessary conditions of a cottage, in order that it may be healthy and comfortable? What is the use of a fire-place in a bed-room?

2. Give some of the various ways with which you are acquainted of preserving meat or vegetables, so as to lay them up in store for future use.

3. Of the modes of cooking animal food—roasting, boiling, stewing—which do you consider the most economical, and why?

4. What are the nutritive properties of milk? Explain the processes of making butter and cheese, and the way in which they must be treated in order to make them keep.

5. What do you consider a proper and economical diet table, for a week, for a family, consisting of a man, his wife, and four children; earnings, twelve shillings a-week?

SECTION III.

1. What is the difference between an artery and a vein—between arterial and venous blood?—and why is the cutting or rupture of an artery more dangerous than a vein?

2. Does the blood undergo any and what change in circulating through the body? and explain the functions of the heart, arteries, and veins in the circulation.

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3. What are muscles, tendons, and nerves, and their uses in the animal frame?

4. How would you treat a scald or a burn?

5. Give your reasons for thinking that exercise is necessary and generally beneficial for health.

6. What are the advantages of cleaning the teeth daily; and what are the disadvantages of losing them, or of their decaying in early life?

AFTERNOON.—*Two Hours and a-half allowed for this Paper. Two Questions to be answered out of each Section, and others, as time may permit.*

SECTION I.

1. Draw out a series of lessons on domestic economy, such as you think would prove useful to the elder girls of your school, and describe one lesson in the way you judge necessary to impart it.

2. In what respect do you perceive the homes of your scholars to be deficient, and the teaching of your school to act as a remedy?

3. Describe the manner in which you conduct the needle-work of your school. What distinction do you make between the useful and the fancy work which the children do?

4. Give an outline of a lesson on soap, and its uses.

5. Give your reasons (if any) for regarding a popular knowledge of the atmosphere, water, heat, gases, animal economy, &c., as not unsuited to girls.

SECTION II.

1. What is meant by "hard and soft" water? what is the cause of it? and what are the effects of hard water in cooking and washing?

2. What kind of substances are removed by filtering and by boiling water? Explain the process in both cases.

3. Why do woollen things shrink when washed?

4. What are the advantages of woollen and cotton things as clothing for the labouring classes, over linen? and why is cotton preferred in a warm climate?

5. What is the best tea-pot to use, and why?

APPENDIX C.

ADDRESS of LORD ASHBURTON, to the ELEMENTARY SCHOOLMASTERS assembled at WINCHESTER, on Friday, December 16, 1853.

LORD ASHBURTON rose and said—I rejoice to see so large an assemblage on this occasion. I cannot but consider it as a token of the interest generally felt in education, as well as a proof of the favour with which you are disposed to regard an attempt to diffuse the knowledge of common things. Before, however, I lay any statement before you, let me thank Mr. Brookfield, who has given me this opportunity of meeting the schoolmasters of his extensive district face to face. I should otherwise have been obliged to resort to writing, and should have been prevented from adding the many explanations which, in the course of these proceedings, may be found desirable.

In the cordial and complimentary letter which has just been read from the Bishop of the Diocese, my project is spoken of as a new one. Now I am anxious to disclaim all pretensions to novelty or originality of any kind; my desire is to see extended to every village school on a lower, and therefore easier, scale that which has been found to succeed admirably at King's Somborne. The labourers' children who have been there

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educated are more docile, more rapid, more ingenious in their work, more comfortable in their homes, more contented with their lot, for the training they have undergone. My desire is, through your interposition, to diffuse these advantages among the thousands whose welfare is dependent on you. I have arrived at these views by no process of theoretical reasoning, but by positive personal experience.

Between Eton and Oxford I studied six months at the University of Geneva. I did not, indeed, learn much, but my eyes were opened to mark and understand what had before passed unheeded. Faculties were called into play which lay till then undeveloped, and I found my mind ripen more rapidly during these few months than in years previous; and now, advancing in age, I still continue to add more and more to my knowledge by the application of the general principles of common things which I there learned. But I will detain you no further on preliminary ground; I will proceed at once to read the scheme of prizes and the conditions on which they are to be competed for, together with such explanations as are necessary to convey my objects.

SCHEME.

At the examination for registration at Easter, 1854, Lord Ashburton proposes to offer seven prizes, to be adjudged, as early as conveniently may be afterwards, by certain of Her Majesty's Inspectors, upon the terms and in manner following, viz.:—

One student's prize of £8, for *attainment* in the knowledge of common things, open exclusively to students, of at least one year's standing, at the Wolvesey Male Training School, Winchester, and to such actual schoolmasters as, having completed their training at that Institution, shall have left it within a twelvemonth previous to the time of competition.

Two teachers' prizes, of £15 and £7 respectively, for qualification and success as *teachers* of common things, open to all schoolmasters—whether trained or not—of Church-schools liable to inspection in Hants or Wilts, who shall have kept their present schools for not less than nine months previous to the time of competition, and shall retain them three months later.

At the Easter examination, a period not exceeding one day will be devoted to a paper, and, if practicable, *viva voce* examination, also to all competitors alike, whether for students' or teachers' prizes. The student who obtains the greatest number of marks above a minimum will obtain the student's prize. Such teachers as reach or exceed a previously fixed minimum of marks at this examination will probably be visited afterwards at their respective schools, where they will be able to afford evidence of their quality and success as teachers, and where such evidence will be chiefly looked for in the actual intelligence and attainment of the children in the subjects under consideration.

In the distant possibility of the fixed minimum of marks not being obtained for either attainment or teachership by the respective competitors, the respective prize or prizes will not be adjudged.

Precisely similar prizes, on terms (*mutatis mutandis*) precisely similar, will be offered to the students at the Salisbury Female Training School, and to the schoolmistresses of Hants and Wilts.

One teacher's prize of £10 will be offered for competition by teachers (male or female) of schools open to inspection in Hants and Wilts, but not of the Church of England. The paper part of the examination for this prize to be taken at the same time and place as the others; and the schools of the competitors to be afterwards visited, and their papers revised by the appropriate Inspector.

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It is to be distinctly understood that this scheme is, for the present, experimental and provisionary, and subject to any modifications which, after Easter, 1854, may seem expedient to the promoter.

Such, gentlemen, is the scheme which I have been recommended, for the present, to adopt, and such the prizes which I venture to offer for your competition. But you are entitled to know more: you have a right to know the objects which I have in view; you have a right to be assured that I have not lightly and inconsiderately taken upon myself the part of interfering in your pursuits.

The first person whom I consulted on the subject was Mr. Brookfield; and you see him now by my side, cordially assisting me with his approval and co-operation.

I have further consulted the Dean of Hereford, and I am happy to say that he has already announced prizes of the same nature for the county of Hereford, in conjunction with Dr. Henry, of Haffield.

Sir J. Kay Shuttleworth has also given me his advice, and I have reason to believe that both he and Miss Burdett Coutts, Lord Lansdowne, and Lord Granville, intend to offer similar prizes in their respective localities.

I have, moreover, the sanction of the Councils of the Diocesan Training Schools of Winchester and Salisbury, as well as the cordial approval of the Bishop and Dean of Winchester, and of the Bishop of Salisbury.

It is with confidence therefore that I turn to you, and crave your assistance in this good work of diffusing among the people a knowledge of the principles of common things, for in doing so, you will lay down still broader and more enduring foundations for the inculcation of piety and submission to the divine will.

When we teach the child that the stars which spangle the sky are worlds mightier than this, that they are inhabited, probably, by God's creatures, in number beyond conception; and that nevertheless the Creator of all this, watches over his every thought, word, and action, with the tender concern of a parent, can we do otherwise than elevate his soul by the inspirations of duty and of love?

I do not require you to remit in the slightest degree your attention to the mechanical arts of writing and reading, or the practice of arithmetic; but I do ask you to turn your attention, and the attention of your scholars, to the acquirement, at the same time, of other principles of knowledge, which will continue fruitful of improvement, as reading and writing are fruitful of improvement, in afterlife.

I ask you to show, not only by your lessons in school, but still more powerfully by your example out of school, how the garden can best be cultivated; how the dwelling may be most efficiently and economically warmed and ventilated; upon what principles food and clothing should be selected; how chronic ailments may be averted by timely attention to premonitory symptoms, and recourse to the physician. You can teach the measurement of work, the use of the lever, the pulley, and the windlass; you can, in short, expound those methods suggested by ever-advancing science, by which toil may be lightened, and subsistence economized. All this is capable of being taught, and well taught.

Why is one mother of a family a better economist than another? Why can one live in abundance, where another starves? Why, in similar dwellings, are the children of one parent healthy, of the other puny and ailing? Why can this labourer do with ease a task which would kill his fellow? It is not luck nor chance that decides these differences; it is the patient observation of nature, that has suggested to some gifted minds rules for their guidance, which have escaped the heedlessness of others.

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Why should not these rules, systematized by science, illustrated by your didactic powers—why should not they be imparted to the pupils of your schools, to enable youth to start at once with the experience of age? or if this be not in every case possible, why should not all be taught betimes to read those lessons in the book of nature from which some have derived such unquestionable advantage?

Remember that it is by the daily use of the powers of nature, that man feeds, and clothes, and houses himself. He employs fire in a hundred ways for a hundred purposes; why should he not be taught the doctrine of heat? for some purposes he may learn to use it better; he may learn to use it for more.

Again, he passes the livelong day in the application of the mechanical powers; why should he not be instructed in their principles also? It is true that princes in this land are ignorant of them as well as peasants. In this progressive country, we neglect that knowledge in which there is progress, to devote ourselves to those branches in which we are scarcely, if at all, superior to our ancestors. In this practical country, the knowledge which gives power over nature is left to be picked up by chance on a man's way through life. In this religious country, the knowledge of God's works forms no part of the education of the people, no part even of the accomplishments of a gentleman; but this judicial blindness cannot much longer exist. If we wish to hold our rank among nations, if we intend to maintain that manufacturing ascendency which is the chief source of our national strength, we must carry this study of common things not only into the schools of the poor, but into our colleges and universities.

But there is still another consideration which I would fain place before you. A knowledge of the principles on which he has to act will sweeten to the labourer and to the mechanic their daily toil. What is it that gives such a zest to our national games as to divert men from the due prosecution of their business? There is at least as much labour in cricket and foot-ball, as in ploughing or carpentering, but there comes in addition to the labour, that which extracts all that it has of repulsive or irksome—there comes the pleasurable development of skill and ingenuity. Why should we not then put the labourer in the position to develop his skill and ingenuity, and thus enable him to sweeten his daily toil? At present he drudges through his allotted task more like a machine than an intelligent being. He just does what others have done before him, he knows not why. But inform his mind, bring his head to bear as well as his hands—to the pleasurable excitement of developed ingenuity and contrivance add the still more pleasurable consciousness of exerted power—let him feel that he may out of his own resources master difficulties, and possibly invent new processes—that man will raise his head more proudly; he will feel the self-respect of a higher occupation; he will put his heart into his work; he will do what he does better; he will earn not only more for himself, but more for his master, and for his country.* But this is not all: the habit of self-reliance, the sportive interest which he takes in the use of his

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* The operatives of our great towns have long felt the degradation of the mechanical drudgery to which they think themselves condemned; they feel a craving for some intellectual pursuit which shall beguile its monotony; but their struggles for relief have taken a wrong direction. They have sought to develop their understandings in something out of and above their daily occupation. Instead of first mastering the principles which governed its exercise, they have thought only of quitting their own sphere, under the notion that they can only raise themselves by doing that which those above them do, and learning that which those above them learn; whereas that which really elevates a man is the cultivation of mind, which follows upon its enlightened application to his work.

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awakened faculties will not only prosper his work in good times, but it will brace his spirits, and nerve his resolution to bear up against misfortune. When engaged in the contest of life, with the thousand material difficulties which perplex the most fortunate, which is the happier lot? Is it the lot of the man who folds his arms in the helplessness of ignorance, or of him who battles it out by the exercise of his mental faculties to the last? Whose courage is the most tried, whose nerves the most worn, who suffers the bitterest mental conflict—the soldier standing at ease under fire, or the soldier engaged in death-struggle with his enemy?

If, therefore, we wish to consult the happiness of the rising generation, let us put them in a condition to give battle to the ills which encompass them, to employ all the powers of their mind, all the resources of their imagination; so shall we substitute, in times of difficulty and distress, manly confidence and cheerful alacrity for the sullen, spiteful moodiness of despair.

But there is another class of common things to which I have not alluded, the ignorance of which bears still more weightily on the welfare of society.

A friend of mine heard a village dame observe, a few days ago, "I should like to know why they have gone and raised the price of bread?"

Is it right, I would ask you, that the poor should be left under the impression that they owe the price of their food to the baker or the Government—the price of their labour to the free will of their employer? Are such convictions as these favourable to the maintenance of the kindly feelings essential to the happiness and peace of society? Do they not encourage the pernicious and degrading idea, too prevalent among the labouring classes, that their dependence is not upon the God who made them, and, through the blessings of God, on their own exertions; but that their dependence is upon their more favoured brethren, who have acquired, by their wealth, the power of dealing with the poor for good or for evil, as it may flatter their benevolence or indulge their avarice?

If you want further evidence of the evils of ignorance on this subject, look at what is now taking place at Preston: employers and operatives are there contending for mastery, under the fatal delusion that it will be given to the victor to fix hereafter for his advantage, according to the free dictates of his own will, the future remuneration of labour. They have persuaded themselves that God has so organized society as to leave the rate of wages to be decided by scramble between contending classes. They deem it consistent with his wisdom that He should introduce a certain element of discord there where He seeks to maintain harmony and peace. They think it consistent with his justice that He should permit either masters or men to fix that at the suggestion of caprice, prejudice, or interest, upon which the well-being of the masses, and the progress of mankind in wealth and civilization must ultimately depend.

As an illustration of this question, take a leaf out of the history of Ireland. The labourers there were living on starvation wages, not on account of the tyranny of capital, but for the want of capital to give them work. Thousands were ready to give their labour, with thankfulness, at a trifling advance of pay. Tempted by the hope of gain, a manufacturer transferred his mills and machinery to this site of cheap labour. He succeeded himself; for he sold his goods as dear as Manchester-made goods, and he retained as profit not only the same profit as that with which the Manchester man was satisfied, but the entire

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difference between the Manchester and Irish rate of wages. His workmen, also, were benefited, though in a far slighter degree. The division of profits, therefore, was unequal. This inequality was permissible indeed for a time—it was necessary that it should exist for a time, in order to attract capital to Ireland; but it would have been inequitable that such an inequality should have continued permanent. It was abhorrent to God's laws of the universe. Natural influences were at once called into operation to interpose and redress it, and they would have redressed it if the ignorant impatience of man, blind to the counsels of God, had not broken in with its strikes and intimidation, ruined the manufacturer, and restored the Irish workmen to their old state of starvation.

But let us now see how God's laws would have worked. Allured by the prospect of equal profits, other manufacturers would soon have followed the first adventurer. New mills would have required new hands, and the transfer of capital to Ireland would have continued at a rate proportioned to the advantage to be gained from it, until the wages there had been raised to an equality with the wages in England. This is no peculiar case; we must not suppose that God's laws work only in Ireland—that they are inoperative at Preston. I believe that last year, as in all times of prosperity, the level of the master's profits at Preston and at Wigan were rising above the appropriate rate; or, in other words, above the height at which nature would permit them to remain. I conclude that such was the case, not from the use of any private or public documents, but from the rapid increase of mills and machinery. I saw that natural causes were in operation to redress the inequality; and just as the traveller infers the existence of crime in a country from the sight of a gallows, so I inferred that the master had too large a share of profits, because I saw the hand of God at work to diminish those profits. God does not work as men do, by violence and coercion. He does not convulse society by his renovations and reparatory measures; He acts by the infallible but peaceable influences of self-interest, arising out of the very evils to be redressed. The inordinate profits of the masters were causing the rapid erection of new mills, of new machinery; more hands would have been required to work them, and more hands were only to be obtained at increased wages.

But all this is now at an end. Who will build mills to be worked how and when it may please a trades' union committee to dictate? The manufacturer must divide higher profits; that is to say, he must necessarily receive a higher share in the division of the profits with his men, in order to ensure him against such disasters as this. The men are, therefore, actually busy in raising the master's share to the diminution of their own. Add to this, that they are driving the capital into other employments, which would have come in to compete for their services and raise their wages.

In the last naval war in which we were engaged, there was one occasion, I remember, on which, in order to spite their captain, the men refused to stand by their guns, and received each broadside that shattered their decks with cheers of savage exultation. I fear we have arrived at some such mad condition of mind at this moment. England is engaged in a death-struggle even now with the other nations of the world for manufacturing ascendency, and a portion of her children are looking with complacency upon the fearful breach made in her resources and her credit—a breach wrought not by an enemy, but by their own suicidal acts.

Much, however, as we must deplore this fatal ignorance and its consequences, it is impossible to refuse our sympathy to the motives which actuate the large majority of those now engaged in the contest.

The people of Preston are enduring privation not for their own sake only, but for the emancipation, as they think, of their whole class from the tyranny of their employers. They are animated, many of them, by feelings as chivalrous, as noble, as any which prompted the heroism of the Tyrolese Hoffer or the Swiss William Tell; and all for no purpose. It is for a mere delusion that they not only sacrifice their present comfort and their future health; but as the Israelites of old passed their children through the fire to win the favour of Moloch or Ashtaroth, so they are passing their children through the furnace of affliction, disease, and want, to win the interposition of a principle just as false, just as delusive. Whatever may be the result of this contest, there will be no peace, no harmonious co-operation of classes, until the delusion is dispelled, until the operatives are convinced that no master, no capitalist, is arbiter of their destiny; that it is not within the power of one manufacturer, or of any set of manufacturers, permanently to raise or lower the remuneration of labour. There is little new in the world; ignorance is ever producing the same wild struggles, under the influence of delusive hope or delusive fear. This strike is but the old story which comes again and again in the social history of mankind. The mob of Petersburgh thought the cholera the work of the physicians, and they murdered the physicians. Under the same affliction, the mob of Paris thought that the priests had poisoned the wells, and they murdered the priests. The mob at Milan thought that the corn-dealers had produced the famine, and they murdered the corn-dealers; and now the operatives of England think that the masters regulate wages, and they determine to bind them hand and foot by restrictions more fatal to industry than the worst feudal restrictions of the dark ages, in order that they may exercise that power themselves. But wages are not things to be scrambled for, they are regulated by the known and well-advised laws of nature—laws which cannot be departed from without introducing confusion and mischief. Still less can the restrictions be introduced with impunity which crush the improvement of the operative, by the imposition of equal wages on the diligent and the idle, on the skilful and the unskilled, which crush the enterprise of the masters, by exacting such increase of wages for new articles, or improved construction of old articles, as to defeat all hopes of advantage.

Having given you this inadequate exposition of the advantages to be derived from the knowledge of common things, I must now proceed to inform you why I have distinguished, in the assignment of prizes, the merits of the scholar and of the teacher. I have done so in order to familiarize to the youngest among you this important truth, that no knowledge, however profound, can constitute a teacher. A teacher must have knowledge, as an orator must have knowledge, as a builder must have the materials with which he is to build; but, as in choosing the builder of my house I do not select the man who has most materials in his yard, but having satisfied myself that he has enough for my purpose, I proceed to select him by reference to his skill, and ingenuity, and taste; so, also, in testing an orator or a teacher, I satisfy myself that they fulfil the comparatively easy condition of possessing sufficient materials of knowledge with which to work, I look then to those high and noble qualities which are the characteristics of their peculiar calling.

There were hundreds at Athens who knew more than Demosthenes, many that knew more at Rome than Cicero; but there was but one Demosthenes and one Cicero. Who, in speaking of these great men, speaks of their knowledge? For these reasons, neither would men

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speak of knowledge as the essential attribute of the teacher. Your business includes an important part of oratory; you have not, indeed, to work on the passions; you have not to subdue an antagonist; but you have to reduce your ideas into the simplest and most elementary form; you have to cultivate the power of illustration; you must be fluent, simple, graphic, animated, judicious, patient; you must, moreover, have an intimate knowledge of the class you address. It is not enough that you should rear a new edifice of fresh knowledge on the surface of the child's mind such as you find it. Before you attempt to build, you must probe that surface, ascertain its nature, clear away rubbish, if any such exist, with the view of working on a sure and lasting foundation. Again, you must not build too fast, lest the work crumble as you proceed. The mere scholar has no perception of all this; he possesses, indeed, the materials, but he knows neither where, nor how, nor when to use them. His knowledge is confined to himself alone, while the teacher places himself at once, by instinctive faculty, in mental relation with every child of his class.

I am anxious, therefore, to impress on your minds that an acquaintance with the subjects you have to teach forms but a small part of the qualifications which, as teachers, you have to acquire. I wish to warn you against the mistake of expending upon unnecessary attainments time which ought to be devoted to the essential attributes of your especial calling.

But there is still another point to which, as teachers, your attention should be directed, and that is, to the due selection of the things to be taught. I have spoken hitherto only of your duties to yourselves. I come now to the more important consideration of your duty to your pupils.

Let me take a case—that of geography. It is desirable that a child should have a general knowledge of the structure of the world. He is shown on the globe the comparative masses of sea and water; he learns that all that is coloured as land is like that which he inhabits, save, perhaps, that the mountains are higher, the rivers broader, the climate hotter. By all this he profits. He gets a general notion of the earth, a notion of the position of our colonies, a notion of the relative size and distance of France and Spain; he has, moreover, acquired these notions himself, by the use of his own eyes, not through the medium of your words.

But if you go further, and insist that he should learn the names of these several mountains and islands—names which convey no ideas, present no image, but have only been applied at haphazard, to enable the inhabitants to describe their own country one to another,—you just load his memory to no purpose with unconnected, and, therefore, barren facts; barren, because demanding no assent, leading to no comparison, serving no purpose of illustration, they call forth no action of the remaining faculties of the mind.

And here let me remind you, that it should be your especial care not to overtask one faculty; but, in conformity with the training of nature, you should develop all—the practical and the reflective,—as well as the memory. You should remember that you are obliged to overburthen the memory, by the necessity of imparting the use of reading, writing, and by the earlier rudiments of summing, as this last subject is in general taught. While the memory is being worked in retaining these mechanical processes, the other faculties remain almost dormant. Your business, therefore, is so to select the other branches of instruction as to spare the memory, and to develop the comparatively unused faculties. This you can eminently succeed in doing by opening the minds of your

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pupils, to reflect and reason upon the thousand natural and social phenomena which encompass their infant life. You can, moreover, instil into them a habit of observation and reflection, which is a thousand times more valuable than any mass of facts, however important, deduced from the observations and reflections of others. What you have to teach is not merely to learn and repeat; what you have to teach is how to think and do. Life is not a thing to be known; life is itself an act.

I regard it as a futile excuse, and as a misleading illustration, that, in teaching this multitude of facts, we only scatter seeds over the boy's mind, for the chance of those which are congenial finding root, and flourishing. We do not merely scatter these seeds; if we did only just present them, to be taken or not, as nature prompted, no harm could ensue,—we should act as nature herself acts; but we do more; we force our facts upon the child's memory; we do that which a poulterer does to the fowls he fattens,—he takes them and crams them with the food he has prepared himself. So these poor children are crammed with crude, nauseating facts, to the extinction of their natural appetite for knowledge, and the bounteous designs of God are, by the folly of man, rendered of no avail.

Not only is the mind weakened by this process, but I doubt if it be not also, to some extent, thereby demoralized; for this, like every other kind of what is called smattering, has a tendency to inflate the mind with false notions of superiority, without imparting at the same time, the cultivating influences, and characteristic diffidence of real knowledge.

I will ask you, therefore, to seek, so far as is practicable, to present to your pupils those facts only which are suggestive of thought or action, facts grouped together by essential analogies and resemblances. Depend upon it, they will not pass away from their memories. Nature soon discards what is not used, whether it be a muscle of the frame or a faculty of the mind, or a fact stored up in the memory; but, on the other hand, it strengthens and amplifies what is used.

After these remarks, it is but just that I should be called upon to explain distinctly what it is that I propose that you should teach; how the topics are to be selected, how connected, in what manner brought forward. Allow me to begin by reminding you, that yours is not the only education given in life. There is yet another, beginning earlier, continuing later, producing greater results; and that is the education of home. It is there that the child, by the side of parents, or of its neighbour, is familiarized, partly by imitation, partly by precept, with the rudiments of its future occupation. It is there that the girl is trained to love a mother's cares and duties. It is there that the boy learns to demean himself as a member of society, as a father of a family.

Let any man pass over in his own mind the business of a given day, he will there see how much the larger, the more important part of that business he has learned at home. Let me give you an instance. The Chelsea school, for the education of the female orphan children of soldiers, was given up, because it was found that the girls there educated became an easy prey to the temptations of the world. This was not because they were less religiously, less morally brought up than other girls, but because, being withdrawn as infants from a home education, they lacked that knowledge of the world which home alone can give; because the only experience they had gained at school was how to deal with their girl companions. They had no experience to guide them when brought into contact with other companions and other trials.

Appendix K.

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Such children must have been equally incapable of performing the duties of good housewives, good mothers; in short they had received a mere school education, which, at the best, under the most careful, the most accomplished teaching, left them ignorant of the great indispensable duties of life. And be it remembered that, when, with reference to orphan children, I speak of the advantage of home, I speak of a home under, perhaps, a harsh relation, or under a stranger more harsh, more unfeeling still. But, even in that home, under that severe training, experienced from the tenderest years, nature provides compensations for the lack of a mother's care which no school can give; for, thrown on her own resources, from earliest infancy, in the midst of that world in which she is destined to live, the child grows in experience, as danger springs up in her path. Her quickened perceptions, her rapidly matured character, become her safeguard.

Now, with this education at home, it is not for us to compete, for it is the education of nature. It is acquired not through the medium of words only, but through the medium of the senses also, which senses God has given us to employ for that purpose, graciously allotting to each exertion of their powers its appropriate pleasure, to sweeten and stimulate their use. Your education, on the other hand, is an artificial education, imparted chiefly through the medium of words, appealing mostly to the reason, instead of the senses, divested, I regret to say, too often, through the fault of the teacher, of the pleasurable excitement which God intended to accompany the acquisition of each new idea.

Your mission is to assist and complete the home education. Your care should be so to work as to stimulate, rather than impair, the instinctive craving for knowledge; the vigour of the attention, the retentiveness of the memory, the practical character of the understanding. You will do this best if you take the successive facts in the child's life—facts with which he is familiar; and upon his knowledge of those facts you engraft first the principle or theory which explains them, and then all the kindred facts—deductions from the same principle—which may be useful in afterlife. For example: the child sees the fire kindled by his mother at the bottom of the grate, and asks why. She cannot tell it why, but you can; you can do more,—you can not only explain why fire spreads upwards rather than downwards, but, having done so, you light, by way of further illustration of the principle, a strip of paper; you hold it with the flame downwards, and show how instantaneously the whole is consumed. You light another, and throw it on its side; it scarcely burns. You then proceed, upon these facts, witnessed and understood, to build up other kindred facts, hitherto unobserved, but good for use and improving to the intelligence. You show how, if a girl's frock catches fire, she should at once, in obedience to this same principle, be, like the paper shred, laid flat; and then you might further show how, in conformity with a second principle, illustrated by the way in which a candle is put out by an extinguisher, the air might be excluded from the burning frock, by throwing a cloak or mat over it, and the flame extinguished. Take another case. As the flame of the candle used up the air confined under the extinguisher, and went out for want of more, so we also, sitting in large numbers in a small room, use up rapidly the vital part of the air, and sicken for want of more, and would absolutely die, were the doors and windows altogether air-tight.

Again: water is brought in for breakfast. The child has pumped it. He has seen the pump repaired, and witnessed how his father strained to pull up the very same sucker by hand which, with the help

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of the pump-handle, he has been working up and down with ease. This is one familiar fact whereon to rest the knowledge of the lever. The use of the spade presents another, when it enables the child to tear up a block of clay from its adherence to the soil beneath, which block he would vainly attempt to lift afterwards one inch with his hands. The water is put into the kettle, of which the bottom is purposely left uncleaned, on the plea that the water will on that account boil the more quickly. You confirm the fact; you explain why this is the case, and you show that two principles are involved: one principle teaches, also, that paint exposed to the sun should be of a light colour, in order to stand without blistering; the other principle leads to the further result, that a bright metal teapot will retain its heat longer, and therefore make better tea, than one of crockery, black and unglazed.

Again: the water boils in the kettle by the same law which diffuses the warmth of the fire in the room, and creates the draught in the chimney. By this law the cause of smoky rooms and ill-ventilated rooms may be explained, and the proper remedies suggested.

If you wish to teach geography and the use of maps, construct the first map yourself on the black board, with the assistance of the children. Place the school-house or church in the centre, represent the roads leading to them, and then call on each boy to suggest some other landmark, to fill in the plan. You may take this opportunity of familiarizing your pupils with the technical terms expressive of the relative positions of roads, rivers, and other objects, such as *parallel with, at right angles to*. Technical terms, which are only compendious forms for the expression of familiar ideas, should be carefully taught as rapidly as the ideas themselves become known and serviceable.

For the same reason, the classification of things familiar, which facilitates thought and simplifies the mode of expression, should also be communicated, such as the classification of matter into organic and inorganic, of life into animal and vegetable, etc.

Social questions are more difficult, not because it is less easy to explain them, but because the minds of children are less interested by their discussion. The child understands when and why nuts are cheap. It would be no difficult task to extend the results of superfluity on price to the effect of over-population in the New Forest, where numbers, exceeding the demand for their labour, have been attracted by the prospect of enjoying for their pigs, and geese, and ponies unstinted rights of common. Again, the child knows, by hard experience, that the family must go on half rations when bread falls short on Friday night, and the shop gives no more credit. But ask it what England must do when there is but half a crop? Ask it who will do for England what their mother did for them, when she prevented them from consuming all they had at one meal? You may perhaps lead them, step by step, to see at last that the rise of price is our only safeguard against famine, and that this rise of price is not the work of any one man or of any set of men, but that it originates in the expectation of those who hold corn that they will sell dearer if they sell later. You may, perhaps, succeed in showing, further, that God has not left the many to be preyed upon by the avarice of the few; that, on the contrary, he has so ordered things in this case, and indeed in all other cases, as to make it the interest of the few to consult the interest of the many, and to visit with actual loss those of the few who, out of ignorance, act in opposition to the interests of the many. If, for example, Farmer Styles holds back his supplies in spring, and, by refusing to sell at the price then offered, raises prices to such an extent as to prevent the spring from having its full share of the year's supply, the part of that share

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which has been unconsumed will be added to the share of the summer, and prices will then fall, when Farmer Styles expects to sell at an enhanced price.

You may thus go on founding the unknown upon that which is known and familiar, gratifying and exciting, but never satiating the natural appetite for knowledge, inculcating what, once heard and understood, will never be forgotten, at the same time that you cultivate those faculties which distinguish the man from the brute; and you impart an elevation, a self-reliance to his character which will tend more than any thing to raise him above sensual pleasures. By such training as this you will give him more than mere information—you will give him habits of observing, reflecting, and acting for himself.

If I want to equip an emigrant for the backwoods, should I encumber him with ready-made articles—with chairs, and tables, and stools? Do I not rather teach him how to make these articles for himself out of the materials beside him? You are fitting out the youth for the rude campaign of life. How shall he be equipped? Shall it be with cut and dried ideas, the fruit of the working of other men's minds, or shall he move forth trained to gather, combine, and use ideas, the materials for which encompass him round about? You teach him to read, in order that he may, in afterlife, use the thoughts of the wise among men; teach him also to read nature, which is wiser and more powerful still. Books he may or may not have in his emergencies; nature is always with him. That is not the best army which has the most baggage. What the packs of hounds, and the bands of music, and the services of plate were to our army in Affghanistan, the million facts of modern education are to the boy on his entrance in life; but the first serious conflict, the first encounter with realities, dissolves the charm, and the hard-earned inutilities are discarded as superfluous lumber; and yet

"The world is still deceived by ornament."

By adopting my suggestions you will not satisfy the majority of those who attend annual inspections. Their admiration is reserved for the brilliant results which are to be exhibited by drawing from the minds of children thoughts transplanted there without roots, the produce of wiser minds. Your pupils will be of altogether a different stamp; they will know comparatively little, but the notions they have will be of home growth, of slender immediate-apparent value, proportioned as they must be to the infant minds in which they have sprung, but capable of subsequent development, to meet the emergency which may require their use.

The man of sense will distinguish at a glance their earnest, intelligent eye, their alert manner, their pertinent answers. He will give due credit to your work and to your system; but you must resign yourselves for a time to the fate of being decried and slighted by the majority, who are too apt to value things as they are, not as they are destined to be; and, above all, to underrate the sure and slow growth which is generally the characteristic of the highest merit. Our busy, thoughtless world is too disposed to despise little gains, and yet little gains store most wealth; little moral gains, triumphs over petty temptations, make the firmest characters. So also little intellectual gains, made hour by hour, and minute by minute, at every step in life, the result of early habit and wise education, do more to ripen the intellect and even to mature the character, than any instruction that can be hammered in from without.

It is given to you, teachers of the rising generation, to bend their

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minds in this direction. The misery which can be remedied by the charity of rich men is purely physical, the relief can extend only to few; it neither elevates those who receive it nor their children after them. But the misery which the teacher can avert, by substituting self-support and self-respect for dependence and beggary, has no limits to its amount; it multiplies blessings both on the present and on succeeding generations.

APPENDIX D.

EXTRACT from LECTURE delivered before the UNITED ASSOCIATION OF SCHOOLMASTERS (of GREAT BRITAIN), by MR. THOMAS CRAMPTON.

In some respects I could have preferred a name less vague; the term Natural Philosophy would be more definite, but would perhaps be too limited, and too much identified with the apparatus and experiments of the scientific lecture. Not that this ought to be the case, for the humblest as well as the grandest operations of nature are *God's experiments*; and the most elaborate human apparatus may be regarded but as the toys of philosophy. We must, however, deal with facts as we find them, and accept the term common things to represent our school course of physics, the science of familiar objects, the principles of physiology in their relation to health; to which may be added, the most familiar arrangements of social life, involving the main principles of political economy. Mind, I would refer to the principles of these several subjects, to explain the philosophy of the object or common things selected, and not select a number of common things to illustrate a course of lessons on any of the above subjects. This latter course, though apparently systematic, would be inconsistent with our direct purpose of exploring the philosophy of the facts that fall under our observation. We must, at starting, not only refer to the objects most common to our respective pupils, but also clothe our explanations in most familiar language. Though I advocate the science of common things, I deprecate the scientific language thereof, understanding thereby mere technical phraseology. Nothing I conceive so calculated to defeat our object of arousing thoughtful attention to familiar subjects, as failing to be homely and well understood in our explanations. A feeling of depression inevitably arises in our pupils' minds, together with disappointment, that their labours, excessive and strained, has been in vain. This induces a tone of disgust which is likely to associate itself with other educational operations.

I conceive we shall regard a knowledge of common things less for any probable special adaptation to the future employments of our youths than as bearing on their general development of mind and character. Somebody very justly observed, that we have not to educate boys to become shoemakers, or tailors, or labourers, but men. Of course, the common duties of every-day life among all classes prove the necessity for the knowledge of common things; but whether such knowledge should thereby form part of school instruction is a very different question. It would be simply absurd to attempt to teach one hundreth part of the knowledge gained by common observation. A child sees that a cow has horns, that a dog runs, and that a bird flies, and we need not arrange an enclyclopædiac course, which assumes ignorance of such matters. So far as the mere dogmatic teaching of common facts is concerned, I regard such teaching as *useless*, owing to the knowledge being already gained, and *absurd*, by occupying the time which could be better devoted to the subjects that could not be studied out of school.

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Allow me to claim your earnest attention on this point, as I fear young teachers will be liable to glide unconsciously into this error, of being very industrious in the inculcation of facts, of working very hard at grinding or cramming, esteeming too exclusively the powers of memory, and reproaching themselves for failure at any fact being *unknown*. In such teaching I have not only no faith, but conceive it will produce vague, desultory, and enervating results, tending to supersede rather than stimulate observation, and altogether ignoring the higher mental powers. The want of inductiveness, in truth, characterizes too much of our ordinary teaching. Our lesson books are too often formed on the idea that the development of the reasoning faculty by means of the reading lesson, was not worth consideration. We have had plenty of descriptive lessons of all sorts of things, and in all sorts of styles; but I fear there are few, if any, simple inductive lessons in many of the common reading books.

You are now prepared for the remark, that the including of "common things" in our daily routine depends on what methods we adopt, or rather what principles we keep in view in teaching the subject. I can see no necessity for making it special, if the teaching be merely dogmatic. This mere inculcation of facts on common things, only requires the taking of a quarter of an hour daily from writing arithmetic and grammar, and devoting this time to reading text-books of what any one's fancy may deem common things.

We have, however, something far higher to aim at. Let theorists misunderstand the matter as they may, and let there be ever so much indefiniteness in the detail of topics, and paucity of principles and methods, it is our duty to be masters of our own business, and we may, therefore, welcome "common things" in our daily routine, as an agent for the training of the mental faculties, chiefly that of induction by means of perception. Common things we may regard as the vehicle of common sense, a reasoning, I fear, often wanting to make our mental food digestible. How often we conclude that the knowledge we impart is really assimilated with the child's mind, when the whole affair has been a matter of *words* only, or with perhaps a few vague and unsettled ideas. Now we might gladly welcome the teaching of common things on the ground of *simplicity*, of appealing to knowledge already gained —of enabling the poor *dunces* to emerge from the slough of inactivity— of affording these poor fellows who get scolded enough for what they *don't know*, an opportunity of "coming out" in what they *do know*.

I need not stay to urge further reasons for the adoption of this subject, or to recapitulate those I have adduced. On us, however, rests the duty and responsibility of making the matter perfectly successful, by well devised methods of teaching it, to which I now invite your attention.

Its *place*, I apprehend, will be most appropriate in our gallery or collective lessons. We shall thus take no time from other subjects, and give a definiteness to this branch of school instruction. I believe I am correct in asserting that no new arrangements of subjects will be needful in most schools. Common things, specially such, not only are commonly taught, but have been for many years in well conducted schools.

Let us avoid all hurry and impatience in this procedure. Sedulously abstain from reproving or slighting even vague and absurd answers. In good collective teaching of course a rapid individualizing is a marked feature. Having fixed upon your pupil, make use of his answer whatever it may be; if it be correct, ask *why so?* If vague, inquire further, and show its vagueness; if it be absurd, still probe: still ask *why so?*

APPENDIX K.

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Educe its absurdity; and thus, though you may not, in many first lessons, have succeeded in imparting half a dozen facts, you will have enabled the mind to acquire hundreds. We shall thus practically improve upon the phrase, "teaching of common things," as our aim will be the *science* or *philosophy* of common things.

The process in teaching will, I think, be mainly analytical. We take an object, and set about pulling it to pieces: first into its main component parts, then each of these into its various materials, each material into its elements; every step being developed by rigorous interrogation, bearing on the why and *wherefore* of each fact. Permit me to refer you for illustrations to two lessons which appeared in the *Educational Expositor*, the one on a candle, in vol. 1, p. 325, the other on a fire, in vol. 2, p. 146.

This form of preparing the notes of a lesson appeared to me as best calculated to assist the inductive analysis, and further to indicate the main line of teaching to be pursued by the teacher; for, of course varied and heterogeneous replies would cause him to diverge occasionally; and herein I conceive the task of the teacher will be best evinced in making even a discursive, erratic answer converge to the main purpose of the lesson. I refer you for an example to a lesson on *Home*, in the *Educational Expositor* for January, 1855, showing how the logical arrangement I remarked may be applied to subjects of wider range than simple object lessons.

The preparation of such notes I should much recommend; they contribute to develop the inductive powers of the teacher's own mind; they are of essential service in refreshing his memory during the delivery of the lesson; and no lessons are as yet published that I am aware of, at all meriting the description of being analytic, logical, and inductive. Every teacher can also prepare his own lessons better than others can for him. However, it would be superfluous for me to go much into detail of procedure in giving the lesson, as I am speaking to teachers, who are doubtless acquainted with such details. A few additional hints you will tolerate, for the possible benefit of our younger brethren.

First, I would earnestly impress upon you the importance of carrying out, as much as possible, the valuable Pestalozzian plan of using the object itself. It is a trite maxim with us, that the eye learns as well as the ear, and we do wisely to enlist all the senses we can, in the process of mental development. Lord Ashburton, you remember, attributed the development of his own mind very much to the six months he studied at the University of Geneva. "There," he says, "I did not indeed learn much, but my eyes were opened to mark and understand what had before passed unheeded. Faculties were called into play, which lay till then undeveloped, and I found my mind ripen more rapidly during these few months, than in years previous." I need not stay to remark on the prevalence of Pestalozzian principles and methods at Geneva, where they estimate the importance of objects in teaching much better than we do. However familiar be the object, even such a thing as a pocket-knife, so well known to every urchin, the attention is kept up, interest excited, and general mental activity sustained by the mere sight of the knife. While the teacher educes the philosophy of handles, blades, edges, and springs, or enters into the arena of what schoolboys term *the rickets*, their eyes will be irresistibly attracted towards the simple and well-known object, and how much more so to the new and unknown.

I would next suggest the preparation of a number of simple experiments. Do not, however, mistake my use of the word experiment, or identify it exclusively with philosophical apparatus. Any simple change of any simple substance may be truly termed an experiment, and the most simple one is often the most suggestive. Take, for example, the tearing of a piece of paper, full of most excellent philosophy. Again, how simple, yet how suggestive, Lord Ashburton's pertinent illustration of the burning of a piece of paper. *Why* the paper ignited very easily —*why* the flame ascended—*why* it increased so rapidly when held under the other portion of the paper—*why* it burnt very slowly in a horizontal position—*why* it would probably go out if held above the paper, &c. &c. These questions, simple as they were, would open a pretty extensive range of facts; and good practical lessons would manifestly follow, as the lying down and avoiding the natural tendency to run into the open air when the clothes caught fire—the smothering, covering, preventing access of air to fire to procure its cessation.

Carry this out with the common duties of the schoolboys' daily life. Most of them have to clean boots and shoes: let them investigate why they use the hard-brush for removing the dirt, and why a softer brush for shining; why the blacking must be rubbed while damp to produce a polish, and why if left to get dry, it will turn to a dull white. Additional interest will be thus given to common employments, and generally speaking, the *rationale* of any labour will invest it with a charm highly conducive to its better performance, at the same time making it a vehicle for thoughtful improvement.

In this procedure we must attend to local circumstances, both in regard to the characteristics of a particular school, and also of a neighbourhood. The poor neglected outcasts who fill our ragged schools require somewhat different lessons from the children of the careful, thoughtful mechanic. Shipping affairs, again, would be more suitable to Hull and Liverpool than to Reading and Guildford. Manufactures are essentially home subjects in Lancashire, mining in Cornwall; whereas in Sussex the chief aim would be to enable a lad

"To plough and sow, to reap and mow,
And be a farmer's boy."

And I regard it as a duty for the schoolmaster to make himself acquainted with the history, resources, and other characteristics of the place in which he labours. This association of knowledge with home subjects and common duties will do much to invest other knowledge with a practical character, as well as produce the most desirable result of throwing a person's mind in his work. This, without disregarding the refinements of the ideal, is the great cause of progress of national as of individual greatness. "Seest thou a man diligent in his business," says the wise man; "he shall stand before kings; he shall not stand before mean men." This I believe to be true in every condition, and in almost every case. You may trace the course of many among the poorest clodhoppers, and find examples of some lads being more active, more clever at their work—in short, *doing* better than others. These take a first place among boys, a first place among men. Their course is onward and upward; keeping to their conditions of success, they must rise. They may be pelted by envy, pushed down by unkindness; but, like corks, up they come, and, while true to themselves, the whole world cannot keep them down. The history of mankind is full of such instances, many of which had their first movements directly traced to some striking occasion or peculiar educational circumstances. We have then but to apply the match, or rather to lay the train of common things, having full hope and confidence that such will in due time be ignited, and produce, if not brilliant, at least useful results, in

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exploding ignorance, overturning masses of error, and clearing the lurking-places of vice and wretchedness. Say not that such teaching is unpoetical and utilitarian; it directly tends to develop that true poetry which dignifies the obscure, raises the lowly, exalts the commonplace, and in fact realizes Shakspeare's description of true philosophy, finding

> "Tongues in trees, books in the running brooks,
> Sermons in stones, and good in every thing."

The application of teaching to the common duties of life is no new idea. "If ye know these things," said our Divine Teacher, "happy are ye if ye do them;" and, without intrenching on the field of religious education, I conceive we may do much good by a course of lessons on the common duties of daily life, making these as practical as possible, by requiring the boys so to act under our care. I want to see this applied to the veriest details of daily practice. The most noble principles and exalted conduct are, doubtless, developed by religious teaching; and I do not regard it as religious, consistent, or reasonable to encourage an enthusiastic contempt of God's wonderful works, as displayed in every atom of creation, and also strikingly evinced in the arrangement of human society. Our aim should, on the contrary, be to introduce greater reverence in the minds of our boys, and induce them to treat nothing with contempt, to regard nothing as vulgar or too common to be treated with thoughtful effort. Nor do I think our duty to the subject should be confined to the school-room. I remember passing through the pretty village of Chatteris, and being struck, as every one must be, with the singular excellence of the fruit-trees which are trained most symmetrically against the walls of almost every cottage in the place. I know of nothing peculiar in the climate or soil of Chatteris, or any other cause why every village should not have the same sources of pleasure and profit. Why should we not be pioneers of general improvement—truly home missionaries of every practical good? Indeed we know not one-half the good we may by our position and influence effect. Only let us labour earnestly, with all simplicity of purpose, and without the mischievous alloy of self-glorification, and we need not fear but most useful fruit will be produced even from such humble seed as we can sow.

APPENDIX E.

EXTRACT from a LETTER of the Rev. F. TEMPLE, Principal of Kneller Hall Training College, to the Editor of the English Journal of Education.

We have heard so much lately of the teaching of common things, and of the great blessings which the rising generation are to derive from it, that we have begun to think that we know the meaning of the phrase, and that it is something very good indeed. But I fear that unless we take the trouble to form a more precise conception of it than we have yet done, we may miss this very good thing, and get a very poor thing instead.

What are common things, and what the science of common things? Is speech a common thing? Most people use their tongues pretty frequently every day. If I send a boy with a message, I require him to use it in my service, and, perhaps, depend on his using it in the way I mean. We use it in the most solemn acts of our lives when we pray to the Almighty; and we listen to it, and must therefore need to understand it well, when God's minister gives us God's message. This

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very common thing surely ought to be well studied. A precise knowledge of what our words mean when spoken to others, and what the words of others mean when spoken to us, is the knowledge of a very common thing. I suppose, therefore, the laws of language form a part of the science of common things. But no; I am wrong. In no enumeration of common things do I find grammar or composition included.

Is the law of the land a common thing? I constantly want a knowledge of that law. A poor man wants it even more than I do. There is no man who does not need to know how he is to right himself when wronged, what is the quickest way of recovering a debt, what is the limit of his own legal powers. There are knavish attorneys in the world who sometimes involve a poor man in expenses from which a little knowledge of law would have protected him. There are others who intimidate a poor man by threats, which a little knowledge of law would set at defiance. Surely what is the need of every man in every business transaction with his fellows must be a common thing. But no; I am wrong again: the elements of law are not among the common things.

Are the laws of the soul among the common things? I am made of soul and body; and the former is, perhaps, of nearly as much importance as the latter. So necessary is it for me to learn something about the laws of the soul's life and action, that the intercourse of the world compels me to do so, whether I will or no. But learning so acquired, though real enough, is fitful, uncertain, vague. I ought to know such laws in the fullest clearness. The knowledge of them is not merely of great importance to myself, but of nearly equal importance to others. My children may depend on that knowledge for the best part of their training: how habits are formed, still more how they may be cured; what is the use of discipline, what the limits of it; what is the rightful place of conscience, and what mistakes may be easily made in her name; the best way of acquiring knowledge and improving the mind without assistance; all this is too important, and assuredly too common a thing to be left to the mere chance of instruction of that mother of all invention, necessity. But no; I am wrong again. The well-intentioned, anxious father, whose mistaken severity has hardened the child's unruly temper in the endeavour to bend it, must not be accused of ignorance; but if he does not know the principle of the barometer, your last number tells me that he is to be asked, "Why don't you know such a common thing as that?"

Now, there may be many excellent reasons for not teaching these subjects with the same zeal as we are to teach chemistry and natural history, mechanics, hydrostatics, optics, and electricity. But are they not common things? At any rate, if we mean to be precise, the sooner we get another title instead of common things "for the new branch of elementary education" the better.

At present the phrase is delusive. It seems to imply that a youth, instructed in these favoured studies will issue from his school armed to encounter and triumph over all the common difficulties of life; that though some other instruction may be useful, this is indispensable—nay, considering the shortness of our lives, and of the part of them given to education, perhaps even sufficient; and that a man is better equipped for the world if he understands the construction of his own spine, than if he can write a neat account of to-day's work or a plan for to-morrow's. Lord Ashburton, indeed, seems to believe that even already it is the possession of this knowledge of "common things" which distinguishes the successful from the unsuccessful peasant. "It is the patient

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observation of nature," he says, "which makes one mother of a family a better economist than another; which enables one to live in abundance, where another starves; which, in similar dwellings, makes the children of one parent healthy, of the other puny and ailing." I must say, that in this point my experience does not agree with his lordship's. I have a strong impression that, in nine cases out of ten, if you pick out the neatest cottage and the healthiest children in a village, you will find the owners possessed of very little superiority in the knowledge of common things. The difference, as far as I have seen, is invariably moral, not intellectual; the result of better tastes and firmer character, not of deeper acquaintance with the laws of nature. A tidy woman keeps her house and children clean, not because she understands the principles of ventilation or the action of the human skin, but because she likes cleanliness and hates dirt. She economizes her husband's wages, not by better knowledge than her neighbours, but by greater care and diligence. And on the other hand, I have seen instances of considerable knowledge combined with very untidy and nasty habits of life.

On the whole, it seems to me that the title of "common things" is not very easily intelligible by itself. In order to understand it, I suppose I must have recourse to the books in which this knowledge is said to be found, and the examination questions in which it is contained. And it would then appear to be nothing else than the elements of physical science and political economy. But this definition is not yet precise enough; for if it were, there seems no reason why the phrase "common things," an ambiguous and rather ambitious phrase, should be used instead. Nor, indeed, would the promoters of the movement feel quite satisfied to identify their new branch of elementary education" with any thing so old and familiar as the rudiments of physical science. Lord Ashburton evidently means to encourage the instruction of the children of the peasantry, not merely in certain subjects, but in accordance with a certain method. He does not mean merely that the children should be taught the principles of chemistry, of mechanics, of pneumatics, and the like, but that the teacher should, as far as possible, take nature for his laboratory and demonstration room; should make all his science immediately practical and real; should compel his pupils to feel that the knowledge which they were acquiring, was not some recondite mystery, with which their lives had little to do, but a matter of the most ordinary experience, and one in which their concern never for one moment ceased. The science of common things is not to be defined, the rudiments of physical science and of political economy, but these rudiments as illustrated in daily life.

With regard to this method of teaching I have nothing to say but praise. The difference between real and hypothetical illustrations, between concrete and abstract demonstrations, is so vast, that no one has any right to be called a teacher of children who does not use the real and the concrete whenever he can. An experiment like the Dean of Hereford's now celebrated comparison of the two teapots is worth more than a whole course of lectures. In fact, the success of scientific instruction, will generally be in the inverse proportion to the quantity of artificial apparatus used in giving it. What is exhibited by the aid of rare and costly apparatus will inevitably seem to belong to some unapproachable region, and not to this every-day earth; and the knowledge thus acquired may be sound in itself, but will surely be fruitless of all intrinsic growth. Too much praise can hardly be given to such a book as "Dawes' Suggestive Hints," considered as a manual of the art of giving lessons. The only objection indeed that can be made to this method of teaching is its excessive difficulty. To put together a few

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illustrations from daily life is easy enough. But he must be no common master of his art who will give a complete system of instruction in any subject with only such appliances. Even in the laboratory, where our experiments are carefully freed from every thing foreign to the principle which we wish to illustrate, they sometimes fail. In nature we rarely, if ever, get the action of a principle pure. Every real phenomenon is, as it were, the confluence of so many physical laws acting at once upon it; is the subject of so many exceptions and peculiarities, that it is the very hardest thing to go far with such illustrations and not break down. The chimney will not smoke when it ought by all rational principles to smoke furiously; the water will retain heat when it ought to have become cool; the water which ought to turn milky remains obstinately clear; and that which should be clear is quite white. And even when there is no such mischance, the success of our natural experiment (unlike the artificial one in the laboratory) is so unmarked as to be hardly perceptible. Our mechanical illustrations are thwarted by the perpetual presence of friction; our chemical, by want of purity; our electrical, by the state of the atmosphere. It sounds very easy to say, teach by reference to real life; but those who have tried it, know that it is about the hardest problem which a teacher can be set to solve; and that just in proportion as the teaching is required to be exact, does it become almost impossible. But wherever real illustrations are possible, there they are essential, if we are to plant living seeds, and not dead rules in the minds of our pupils.

Nor would I desire to say any thing against the subjects included under our title. I think it quite unquestionable, that men whose chief business it is to subdue nature, ought to learn what nature is. If history and philosophy and the laws which govern minds and wills are the proper study of the governing classes, physical science and the laws which govern nature are the proper study of the working classes. But I have now said all. And I hope that you will let me say a word on the other side, for I think it is really needed.

In the first place, there is no slight danger that this physical science may degenerate into a mere mass of unconnected facts. The science is large: the illustrations that can be obtained from reality are few, and cannot fill up the limits of the science. If you keep to reality your lessons become a mere series of receipts like those in the cookery-book, receipts for curing smoky chimneys, for making strong tea, for ventilating a close room. The unity and completeness of the science being lost, very few of the learners will be able to adapt their learning to new cases, and it very rarely happens that in practice exactly the same case will turn up again. They ought to reason by analogy. Yes; but the very essence of analogy consists in a due relation of the two things compared to the whole science under which they fall. It is no reasoning by analogy when an old woman wants you to cure your indigestion by what cured her rheumatism, even though the symptoms in each case may happen to be pains in the chest. We escape this danger by going into the principles of what we teach. Certainly; but carry this out, and you soon get very far away from common things.

In the second place, there is no slight danger that one of the chief purposes of all learning may be forgotten. That purpose is not knowledge, but the power of acquiring and using knowledge. The value of a lesson varies generally in proportion to the amount of intellectual exercises which it gives to the learner. If I give a boy a sum to work in the Double Rule of Three, or in Practice, he must put his mind fairly to the task or he cannot do it. I may have to show him how to do it many times; but I never consider him to have mastered my teaching until he can do it without help. The unassisted working of problems is at once the great means of learning and the test that the learning is sound. Just in the same sense, to parse a sentence is a problem at once teaching grammar and testing the knowledge of it. Another problem of the same kind is the composition of a short narrative from memory of one already written, or from knowledge of the facts to be narrated. In all these cases, I can be quite certain that the intellect has fairly done its work, and not merely "assisted" (to use the French word) at the work being done. But if it is hard to find illustrations of physical science, how tenfold is it harder to find problems for solution within the compass of a child's mind. The result is, that the solving of such problems is altogether left out, and the learner does nothing but follow the reasoning of the teacher. Questions may be asked here and there in the course of a lesson, or the whole lesson may consist of a series of judicious questions. But how rarely is the learner left fairly to himself to battle with a difficult physical fact, as he would battle with a difficult sum, and how weak is the intellectual effort required to answer a question forming one of a series, and offering, therefore, every facility for a guessing solution, in comparison with that involved in working out a much easier problem quite unaided. Nor is the difference only intellectual. It is to a child a very real training in moral courage, to face a hard sum or a hard piece of parsing and go through with it; a moral courage never needed, and therefore never exercised in answering the questions of a teacher, who cannot throw time away, and will therefore vary his questions and suggest the answer in less than a minute if you will but hold your tongue.

Then what do I want? First, I want in this teaching of common things, more stress to be laid upon the method, less upon the subject. One of the first results of Lord Ashburton's project was Johnston's series of little books on the "Chemistry of Common Life." They are very pleasant little collections of interesting facts; as specimens of method they are entirely useless. In my opinion, they are at present doing more harm than good. They encourage the notion that teaching common things means giving information about the most common physical phenomena. While we retain this notion we are on the wrong rail, and shall certainly be carried out of our track. Secondly, I want better reading-books for our elder classes than the dry stuff to which we are at present condemned; some acknowledgment that children can feel as well as think; something to cultivate taste as well as to impart knowledge. And thirdly, though I have studied various branches of physical and natural science; yet, as I am not quite familiar enough with my own spine to call the precise knowledge of its construction a common thing, I feel as if it would hardly be modest in me to acquiesce without a murmur in the title "Common Things."

APPENDIX F.

The CULTIVATION of KNOWLEDGE the PROVINCE of MAN as MAN.

But *is* it really admitted, as a great principle for practical application, that the mind—the intelligent, imperishable existence—is the supremely valuable thing in man? It is then admitted, inevitably, that the discipline, the correction, the improvement, the maturation of this spiritual being to the highest attainable degree, is the great object to be desired by men, for themselves and one another—that is to say, that knowledge, cultivation, salutary exercise, wisdom—all that can

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conduce to the perfection of the mind, form the state in which it is due to man's nature that he should be endeavoured to be placed. But then, this is due to his nature by an absolutely *general* law. He cannot be so circumstanced in the order of society that this shall *not* be due to it. No situation in which the arrangements of the world, or say of Providence, may place him can constitute him a specific kind of creature, to which is no longer fit and necessary that which is necessary to the well-being of man considered generally as a spiritual, immortal nature. The essential law of this nature cannot be abrogated by men being placed in humble and narrow circumstances, in which a very large portion of their time and exertions are required for mere subsistence. This accident of a confined situation is no more a reason why their minds should not require the best attainable cultivation than would be the circumstance that the body in which a man's mind is lodged happens to be of smaller dimensions than those of other men.

That under the disadvantages of this humble situation they *cannot* acquire all the mental improvement desirable for the perfection of their intelligent nature, that the situation renders it impracticable, is quite another matter. So far as this inhibition is real and absolute—that is, so far as it must remain after the best exertion of human wisdom and means in their favour, it must be submitted to as one of the infelicities of the allotment by Providence. What we are insisting on is, that since by the law of their nature there is to them the same general necessity as to any other human beings, of that which is essential to the well-being of the mind, they should be advanced in this improvement *as far as they can*; that is, as far as a wise and benevolent disposition of the community can make it practicable for them to be advanced.

It is an odious hypocrisy to talk of the narrow limits to this advancement as an ordination of Providence, when a well-ordered constitution and management of the community might enlarge those limits; at least it is so in the *justifiers* of that social system. Those who deplore and condemn it *may* properly speak of the appointment of Providence; but in another sense—as they would speak of the dispensations of Providence in consolation to a man iniquitously imprisoned or impoverished.

Let the people, then, be advanced in the improvement of their rational nature as far as they can. A greater degree of this progress will be more for their welfare than a less. This might be shown in forms of illustration easily conceived, and as easily vindicated from the imputation of extravagance, by instances which every observer may have met with in real life. A poor man, cultivated in a small degree, has acquired a few just ideas of an important subject, which lies out of the scope of his daily employments for subsistence. Be that subject what it may, if those ideas are of any use to him, by what principle would one idea more, or two, or twenty, be of *no* use to him? Of no use! when all the thinking world knows that every additional clear idea of a subject is valuable by a ratio of progress greater than that of the mere numerical increase; and that by a large addition of ideas a man triples the value of those with which he began. He has read a small meagre tract on the subject, or, perhaps, only an article in a magazine, or an essay in the literary column of a provincial newspaper. Where would be the harm, on supposition he can fairly afford the time, in consequence of husbanding it for this very purpose, of his reading a well-written, concise book which would give him a clear, comprehensive view of the subject?

But perhaps another branch of the tree of knowledge bends its fruit temptingly to his hand. And if he should indulge, and gain a tolerably clear notion of one more interesting subject (still punctually regardful of the duties of his ordinary vocation) where, we say again, is the harm? Converse with him, observe his conduct, compare him with the wretched clown in a neighbouring dwelling, and say that he is the worse for having thus much of the provision for a mental subsistence. But if thus much has contributed greatly to his advantage, why should he be interdicted still further attainments? Are you alarmed for him if he will needs go the length of acquiring some knowledge of geography, the solar system, and the history of his own country and of the ancient world? Let him proceed, supply him gratuitously with some of the best books on these subjects, and if you shall converse with him again, after another year or two of his progress, and compare him once more with the ignorant, stunted, cankered beings in his vicinity, you will see whether there be any thing essentially at variance between his narrow circumstances in life and his mental enlargement.

And where now is the evil he is incurring or causing during this progress of violating, step after step, the circumscription by which the aristocratic compasses were again and again, with small reluctant extensions to successive greater distances, defining the scope of the knowledge proper for a man of his condition? It is a bad thing, is it, that he has a multiplicity of ideas to relieve the tedium incident to the sameness of his course of life; that, with many things which had else been but mere insignificant facts, or plain dry notions and principles, he has a variety of interesting associations, *like woodbines and roses wreathing round the otherwise bare, ungraceful forms of erect stones or withered trees*; that the world is an interpreted and intelligible volume before his eyes; that he has a power of applying himself to *think* of what it becomes at any time necessary for him to understand? Is it a judgment upon him for his temerity in "seeking and intermeddling with wisdom" with which he had no business, that he has so much to impart to his children as they are growing up; and that, if some of them are already come to maturity, they know not where to find a man to respect more than their father? Or if he takes a part in the converse and devotional exercises of religious society, is no one there the better for the clearness and the plenitude of his thoughts and the propriety of his expression? But there would be no end of the preposterous supposition fairly attachable to the notion that the mental improvement of the common people has some proper limit of arbitrary prescription, on the ground simply of their *being* the common people, and quite distinct from the restriction which their circumstances may invincibly impose on their ability.—*John Foster.*

APPENDIX G.

VALUE of KNOWLEDGE in REFINING and ELEVATING the MIND.

How is the mind of the labourer or artizan to be delivered from the blank and stupified state, during the parts of his employment that do not necessarily engross his thoughts? How but by its having within some store of subjects for thought; something for memory, imagination, reflection; in a word, by the possession of knowledge? How can it be sensibly alive and active, when it is placed fully and decidedly out of communication with all things that are friendly to intellectual life; all things that apply a beneficial stimulus to the faculties; all things of this world or another, that are the most inviting or commanding to thought and emotion? We can imagine this ill-fated spirit, especially if by nature of the somewhat finer temperament, thus

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detached from all vital connexion, secluded from the whole universe, and enclosed as by a prison wall. We can imagine it sometimes moved with an indistinct longing for its appropriate interests; and going round and round by this dark, dead wall, to seek for any spot where there might be a chance of escape, or any crevice where a living element for the soul transpires; and then, as feeling it all in vain, dejectedly resigning itself again to its doom. Some ignorant minds have instinctive impulses of this kind; though far more of them are so deeply stupified as to be habitually safe from any such inquietude. But let them have received in their youth, and progressively afterwards, a considerable measure of interesting information respecting, for instance, the many striking objects on the globe they inhabit, the memorable events of past ages, the origin and uses of remarkable works within their view, remaining from ancient times; the causes of effects and phenomena familiar to their observation, as now unintelligible facts; the prospects of man, from the relation he stands in to time, and eternity, and God, explained by the great principles and facts of religion. Let there be fixed in their knowledge so many ideas of these kinds as might be imparted by a comparatively humble education, one quite compatible with the destination to a life of ordinary employment; and even involuntarily the thoughts would often recur to these subjects, in those moments and hours when the manual occupation can and actually will be prosecuted with but little of exclusive attention. Slight incidents, casual expressions, would sometimes suggest these subjects; by association they would suggest one another. The mere reaction of a somewhat cultivated spirit against invading dulness, might recall some of the more amusing and elating ones; and they would fall like a gleam of sunshine on the imagination. An emotion of conscience, a self-reflection, an occurring question of duty, a monitory sensation of defective health, would sometimes point to the serious and solemn ones. The mind might thus go a considerable way to recreate or profit itself, and, on coming back again, find all safe in the processes of the field or the loom. The man would thus come from these processes with more than the bare earnings to set against the fatigue. There would thus be scattered some appearances to entertain, and some sources and productions to refresh, over what were else a dead and barren flat of existence.—*John Foster.*

APPENDIX H.

UNION of INSTRUCTION with EDUCATION.

Some years since, I know not when, it was supposed, or we have said it was supposed, that the whole business of education was to store the mind with facts. Dugald Stewart, I believe, somewhere remarks that the business of education, on the contrary, is to cultivate the original faculties. Hence the conclusion was drawn, that it mattered not what you taught; the great business was to strengthen the faculties. Now this conclusion has afforded to the teacher a most convenient refuge against the pressure of almost every manner of attack. If you taught a boy rhetoric, and he could not write English, it was sufficient to say that the grand object was not to teach the structure of sentences, but to strengthen the faculties. If you taught him the mathematics, and he did not understand the rule of three, and could not tell you how to measure the height of his village steeple, it was all no matter,—the object was to strengthen his faculties. If, after six or seven years of study of the languages, he had no more taste for the classics than for Sanscrit, and sold his books to the highest bidder, resolved never again

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to look into them, it was all no matter,—he had been studying to strengthen his faculties, while, by this very process, his faculties have been enfeebled almost to annihilation.

Now, if I mistake not, all this reasoning is false, even to absurdity. Granting that the improvement of the faculties is the *most* important business of instruction, it does not follow that it is the *only* business. What! will a man tell me, *that it is of no consequence whether or not I know the laws of the universe under which I am constituted?* Will he insult me by pretending to teach them to me in such a manner that I shall in the end know nothing about them? Are such the results to which the science of education leads? Will a man pretend to illuminate me, by thrusting himself, year after year, exactly in my sunshine? No: if a man profess to teach me the laws of my Creator, let him make the thing plain; let him teach me to remember it, and accustom me to apply it. Otherwise, let him stand out of the way, and allow me to do it for myself.

But this doctrine is yet more false; for even if it be true, that it matters not what is taught, it by no means follows that it is no matter how it is taught. The doctrine in question, however, supposes that the faculties are to be somehow strengthened by "going over," as it is called, a book, or a science, without any regard to the manner in which it is done. The faculties are strengthened by the use of the faculties; but this doctrine has been quoted to shield a mode of teaching in which they were not used at all; and hence has arisen a great amount of teaching, which has had very little effect, either in communicating knowledge or giving efficiency to mind.

Let us, then, come to the truth of the question. *It is important what I study; for it is important whether or not I know the laws of my being, and it is important that I so study them that they shall be of use to me. It is also important that my intellectual faculties be improved, and, therefore, important that an instructor do not so employ my time as to render them less efficient.—Professor Wayland.*

APPENDIX I.

ON INSTRUCTION in the NATURAL SCIENCES in ELEMENTARY SCHOOLS (of FRANCE).

(Extract from M. Willms' Works on the Education of the People.)

The law has placed among the objects of instruction in the higher elementary schools, the *rudiments of the physical sciences and of natural history applicable to the usages of life.* We require that this instruction should be admitted everywhere, and considered as imperative in the higher divisions of ordinary schools. Let no one, however, be afraid. I do not ask that there should be everywhere established collections of philosophical apparatus, and chemical laboratories, or that *the three kingdoms of nature* should be studied in every little village school. I only wish, that to the children of the people, there be imparted some knowledge of surrounding nature; that they be made to understand, as much as possible, its beauties, its curiosities, its utilities, and its dangers.

This instruction I require still less for the sake of its material or worldly benefits to the pupils, than for the sake of their æsthetic and intellectual, moral, and religious education. Indeed, knowledge is not only *power*—it ennobles and raises the soul; and at the same time, nourishes, and enlightens the reason. It is of especial importance to education to awaken the curiosity of children, and to satisfy it in a just degree, less for the purpose of storing their minds with varied ideas than for that of cultivating the reason, and giving elevation to their souls.

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The education of the sentiment of the beautiful requires that they should be rendered attentive to the wonders of nature; and intellectual education cannot be better begun, than by a revelation of the marvels presented there: on all sides, religious education may derive great assistance from the contemplation of the harmony and beauty of nature. The empire of superstition, which, in degrading, demoralizes the people, can only be destroyed by the alliance of religion and science.

But the worldly interest of the pupils, also demand that they should receive correct ideas of nature, avoiding all terms too technical and learned. There are many noxious animals and plants: it is of importance that they should be made acquainted with these, although they do not become botanists or zoologists. The most ordinary natural phenomena present dangers; it is necessary to explain such to the pupils in order to secure them from hazard, and this may be done without making them natural philosophers. Many accidents could be avoided by a little knowledge and prudence; and independently of the advantages which science, in penetrating more and more deeply into the secrets of nature, offers to industry, there are some which belong only to those who have some knowledge of that nature in the midst of which they live.

Already in the greater part of elementary schools, the subjects of natural history, and philosophy, chemistry, and even cosmography, are frequently introduced. In the reading books put into the hands of the pupils are to be found extracts on these subjects, more or less abundant: and if the teacher wishes to make them understand what they read, he is obliged to enter with them into details more or less instructive. Religious instruction itself supposes a certain amount of knowledge of nature and the universe. I ask for nothing new, unusual, and unheard of, in demanding the instructions I am now speaking of for all popular schools: I only ask, that, instead of being thus left to chance and opportunity, it should be given more directly, more regularly, and that it should be more complete, without ever assuming a scientific character, and without going beyond the powers of the teachers, or the capacity and wants of the pupils.

This instruction should include the rudiments of natural history and chemistry: the rudiments of cosmography would be taught with geography, of which I shall speak immediately.

The great difficulty is to choose what is suitable to the pupils. A book would be necessary, which would, at the same time, explain the system to be adopted, and expose the more useful and interesting rudiments.

In *Mineralogy*, after having enumerated the principal minerals, from the most common to the most precious, and making the pupils especially acquainted with those within their reach, there should be revealed to them the wonders concealed in the bowels of the earth, and some details given of the working of mines, of metallurgy, and of petrifaction, &c. *Geology* would furnish curious instructions, which are interesting to religion and the history of the human race.

In *Botany* it would be sufficient to instruct the more advanced in the knowledge of the organization of the most perfect plants, the conditions and development of vegetation, and afterwards to familiarize them with the names and properties of the vegetables of the country, of the fruit, and forest trees, of the shrubs, of the useful and various plants, and of the flowers which adorn the fields, the garden, and the forest. There is no special scientific preparation required for this: and the common names should always be preferred to the scientific. A very common wild flower would serve as a guide to this branch of teaching.

In *Zoology* nearly the same method should be pursued as in botany. The birds and insects of the country should form the subject of instruction. The natural history of the ant and bee presents great interest. The marvellous organization of the smallest insect, and of the animalcule, to which a drop of water is a world, may be shown by the aid of the microscope. The services which the domestic animals render to man should be dwelt upon. The children should be made to understand the superiority of man over other living creatures, with whom he has many relations of organization, and material condition—but from which he is essentially distinguished by reason, by the sentiments of the beautiful and the becoming, of justice and injustice—by the religious sentiment, a divine instinct, which, at the same time that it attests for the human race a higher origin than that of the animals, is to man an assurance of another future than that which awaits them.

Thus the description of the outward and inward man, the physical and moral man, would complete this study of nature, and would, at the same time, serve as a foundation and preparation for that of religion, morality, and the philosophy of health.

In *Natural Philosophy*, the teacher should apply himself to explaining to the pupils the most common phenomena, such as rain, dew, snow, and hail, thunder and lightning, the rainbow, water-spouts, falling stars, &c.

APPENDIX K.

VALUE of NATURAL HISTORY as a BRANCH of EDUCATION for all CLASSES.

Natural history is very little estimated as it ought to be. Three considerations recommend it as a most important branch of study for boys and youths in the school and academy.

1. I regard natural history, when judiciously and faithfully taught, as one of the best preservatives against irreligion. Young people enter into life, in ninety-nine cases out of one hundred, as ignorant of natural history as the boy of his father's library, which he has only seen through the glass doors of the book-case. The natural world, instead of a *living*, is actually a *dead* world to the mass of educated persons. They know little or nothing of its facts, and absolutely nothing of its science. It is not surprising, therefore, that most educated persons look upon the works of God, in the visible world, with as little emotion or thought as upon the works of man. They have no settled opinion, no habitual feeling, that a tree is a piece of more admirable mechanism and workmanship than the group of Laocoon, the Parthenon, the transfiguration of Raphael, or the Church of St. Peter's. But, if young people were thoroughly acquainted with the important and interesting facts of natural history, and faithfully instructed in its curiosities and wonders, with an express view to illustrate the power, wisdom, and benevolence of God, can we doubt that they would grow up with such deep and fixed opinions on those important points, as to have no avenue for doubts, either in early manhood, or in later years? Is it possible that youth can appreciate rightly these attributes of their Maker, Ruler, and Judge, when they are so lamentably ignorant of his works?

2. The second advantage to which I refer is, that this knowledge, more than any other, except religion (and what is natural history but

the handmaid of religion?) becomes a perpetual companion by land or by sea, in the town or in the country.

3. A third consideration is, that the curious and interesting facts of natural history are an inexhaustible and varied fund for social intercourse; so that many an hour, now passed in frivolous or useless, if not pernicious conversation, would be both agreeably and instructively spent.—*Grimke.*

APPENDIX L.

On the STUDY of PHYSICS as a BRANCH of EDUCATION for all CLASSES.

With regard to our working people, in the ordinary sense of the term working, the study of physics would, I imagine, be profitable, not only as a means of mental culture, but also as a moral influence to woo these people from pursuits which now degrade them. A man's reformation oftener depends upon the indirect than upon the direct action of the will. The will must be exerted in the choice of employment, which shall break the force of temptation by erecting a barrier against it. The drunkard, for example, is in a perilous condition, if he content himself merely with saying, or swearing, that he will avoid strong drink. His thoughts, if not attracted by another force, will revert to the public-house, and to rescue him permanently from this, you must give him an equivalent. It would, certainly, be worth experiment to try what the study of physics would do here. By investing the objects of hourly intercourse with an interest which prompts reflection, new enjoyments would be open to the working man, and every one of these would be a point of force to protect him against temptation. Besides this, our factories and our foundries present an extensive field of observation, and were those who work in them rendered capable, by previous culture, of appreciating what they see, the results to science would be incalculable. *Who can say what intellectual Sampsons are at the present moment toiling with closed eyes in the mills and forges of Manchester and Birmingham? Grant these Sampsons sight; give them some knowledge of physics, and you multiply the chances of discovery, and, with them, the prospects of national advancement.* In our multitudinous technical operations we are constantly playing with forces where our ignorance is often the cause of our destruction. There are agencies at work in a locomotive of which the maker of it, probably, never dreamed, but which, nevertheless, may be sufficient to convert it into an engine of death. Again, when we reflect on the intellectual condition of the people who work in our coal mines, those terrific explosions which occur from time to time need not astonish us. If these men possessed sufficient physical knowledge, I doubt not, from the operatives themselves would emanate a system, by which these shocking accidents might be effectually avoided. If they possessed the knowledge, their personal interests would furnish the necessary stimulus to its practical application; and thus two ends would be served at the same time—the elevation of the men, and the diminution of the calamity.—*Professor Tyndall.*

APPENDIX M.

On the STUDY of PHYSIOLOGY as a BRANCH of EDUCATION for all CLASSES.

But I have yet to speak of that, through which, I believe, the general teaching of physiology would exercise the greatest influence upon the mind; namely, its being, essentially, a science of designs and final

APPENDIX K.

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causes. In this (if we regard it in its full meaning, as the science concerning living things,) it is chiefly in contrast with the physical sciences, and, so far as I know, with nearly all the other studies of even the widest scheme of education.

I do not say that it is only in living things that we can discern the evidences of design. Doubtless, things that are dead—things what we call inorganic, when we would distinguish them from living organisms—are yet purposive, and mutually adapted to co-operate in the fulfilment of design. We cannot doubt, for example, that all the parts of this dead earth, and all the members of our planetary system, are adapted to one another with mutual influence, balanced and laid out in appropriate weight and measure, fitted each to do its part, and serve its purpose, in some vast design; and thus the whole universe might be called an organism, constructed in parts and systems almost infinite in number and variety, but adjusted with an all-pervading purpose. Still there is a striking difference between dead and living things, in the degree and manner in which their laws and their designs are manifest to us. In the inorganic world, in the studies of the physical sciences, we seem to come nearer to the efficient than to the final causes of events; we discern, it may be, both the most general laws, and the most minute details of the events; but these rarely shadow forth their purpose or design; or, if they do, it is a design in adaptation to organic life, as where we may trace the fitness of the earth and air for their living occupants. But, in the inorganic world, the reverse is true; purpose, design, and mutual fitness are manifest, wherever we can discern the structure or the actions of a part; utility and mutual dependance are implied in all the language, and sought in all the studies of physiology. The efficient causes and the general laws of the vital actions may be hidden from the keenest search; but their final causes are often nearly certain. In the sciences of the inorganic world, we can learn *how* changes are accomplished; but we can rarely tell *why* they are. In those of the organic world, the question "why" can be often answered; the question "how" is generally an enigma that we cannot solve.

Now, were there no other argument for the general teaching of physiology, I would be content with this;—that an education which does not include the teaching of some science of natural designs, does not provide for the instruction of one of the best powers and aspirations of the mind.

The askings of children seem to indicate a natural desire after the knowledge of the purposes fulfilled in nature. "Why?" and "Of what use?" are the ends of half of their untutored questions; and we may be sure they have not the wish for such knowledge without the power of attaining it, if the needful help be given to them. And yet, in the usual subjects of education, nothing addresses itself to this desire, and so there is not only a neglect of the teaching of the peculiar modes of reasoning required or admitted in physiological research; but the natural love and capacity for studying design are left to spend themselves, untrained, upon some unworthy objects; and so they fade or degenerate—degenerate, perhaps, into some such baseness as an impertinent curiosity about other men's matters.

I would, therefore, have physiology taught to all, as a study of God's designs, and purposes achieved; as a science for which our natural desire after the knowledge of final causes seems to have been destined; a science in which that desire, though it were infinite, might be satisfied; and in which, as with perfect models of beneficence and wisdom, our own faculties of design may be instructed. I would not have its

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teaching limited to a bare declaration of the use and exact fitness of each part or organ of the body. This, indeed, should not be admitted; for there are noble truths in the simplest demonstrations of the fitness of parts for their simplest purposes, and no study has been made more attractive than this by the ingenuity, the acuteness, and eloquence of its teachers. But I would go beyond this, and striving, as I said before, to teach general truths, as well as the details of science, I would try to lead the mind to the contemplation of those *general* designs, from which it might gather the best lessons for its own guidance.

If I may presume to speak as I would to boys or girls, I would say, let us learn frugality from some of the designs that we can study in the living body; and surely the lesson may be the more impressive, if we remember that we are studying the frugality of One, whose power and materials are infinite.

Observe, for example, what happens during active exercise; how the heart beats quicker and harder than it did before, and the skin grows warmer and ruddier, and the blood moves faster, and the breathing is quicker. The main design of this seems to be, that the active muscles may be more abundantly supplied with blood. But the beginning in the series of changes, is an instance of that designed frugality of which I have been speaking. Veins, carrying blood to the heart, lie, as you see, branching and communicating under the skin; and there are others like them, deeper set among the muscles of both the limbs, and the trunk. Now, muscles, when they act, shorten and swell up: and in so doing, (as in active exercise), they compress the veins that lie between them, or upon them, underneath the skin. The effect of such compression must be to press the blood in every vein equally in both directions —both onwards towards the heart and backwards from it. All that part of this pressure which is effective in propelling the blood towards the heart is so much added to the forces of the circulation; it is so much direct gain of force. But it may seem as if this gain were balanced by an equal loss, through the influence of the same pressure driving other portions of the blood backwards. And so it would be, but for the arrangement of valves in the veins, which are the instruments of this saving of force. Wherever there are muscles that in their action can compress the veins, there, also, the veins have valves; and a diagram or a model would show that these are little pocket-shaped membranes which project into the canals of the veins in such a manner that they will allow the streams of blood to pass onwards to the heart, but will close at once, and hinder any stream that would flow backwards. Thus, therefore, the effect of muscular pressure on the veins, is (let us say), with a certain force, to propel some blood towards the heart, and with the same force, to press back other blood upon the valves and close them. You will say, then, here is still the same hindrance: if the valves be closed, the stream behind them must be stopped, and there is as much loss as gain. It would be so, if there were not this other provision: that wherever there can be muscular pressure upon veins, those veins not only have valves, but have abundant channels of communication with one another. The back pressure of the blood, and the closure of the valves, is therefore no hindrance to the circulation; for the blood that might be stopped in one vein, makes its way at once into another, by some communicating branch. The general result, therefore, is that all muscular pressure upon veins is an almost unalloyed advantage to the circulation. And now mark the frugality of the design. Veins *must* lie in or near these places, and the muscles *must* act (suppose for some design of our own); and if they are to be in every active exercise, they will need swifter streams of blood than

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will suffice in their repose. The streams could be made swifter by a greater force of the heart; but heart-force is a thing to be economized; and the muscles themselves may, without harm, contribute to accelerate the blood: for in the fulfilment of their primary purpose, of moving and sustaining the limbs and trunk, they *must* swell up and compress the veins that are about them; and this compression can be made effective for the circulation of the blood by the mechanism of valves. So then, in the necessary fulfilment of their primary use, and without the least hindrance or damage to it, the muscles are made to serve this secondary purpose, and all that they do herein is so much saved to the forces of the heart.

Scarcely a lesson in physiology could be given but it might illustrate some such design as this. Everywhere we see examples of parts thus made to serve by-purposes while fulfilling their primary designs.

I will mention but one more. All know that the air we have once breathed is less fit for breathing than it was before, and that if we breathe the same air often, it becomes poisonous, through the mixture of the carbonic acid, and other exhalations from the lungs. We must breathe out the air, therefore, as so much refuse; and ample provision is made that we may do so; and it might seem design enough fulfilled when we are thus freed from our own poison. But is it not an admirable secondary design, an admirable frugality, a true wisdom by-the-way, that, with this same air we speak; that this, which we must cast out lest it destroy us, should be used for one of the noblest powers of man? Surely, one might have supposed, for so great a purpose as the communion of human thoughts, and for all that speech and vocal melody can achieve, there would be contrived some matchless instrument, some rare material. But no: the instruments of human speech are scarcely more complex organs than those which dumb creatures have to breathe and feed with; and the material human speech carries out the refuse of the blood; the very dross of the body is used for the coinage of the mind.

Such might be some lessons in that divine frugality which is ever 'gathering up the fragments that remain, that nothing be lost.' The moral of such lessons is very plain.

Not less significant are those which may be studied in the designs of the body during its development. All these are instances of present things having their true purpose in some future state.

Let me endeavour to illustrate some of them.

I have here models of the changes that the chick undergoes in its development; and what they show might suffice for teaching the development of higher creatures. Now, nearly all we see here is the working out of a design, which cannot have its full end till some future time. These wings and legs—of what avail are they to the prisoner in the shell? Their purpose is not yet fulfilled; they are for the future. But if these be too plain to be impressive, let us look at more particular things.

Observe the changes through which the heart passes from its first appearance as a little pulsating bag, to its being nearly fit for the time when the hatched bird will breathe in the open air. The changes are not merely a growth from a little heart to a big one, but are a series of acquirements of more complex shapes; so that the heart, which at first is a simple bag, then becomes very curved, and then divides into two, and then into three and four cavities. Now, doubtless, in each of these conditions, the heart is exactly appropriate to the contemporary state of the other organs, and the circumstances of the time of life; but each of them is, besides, a necessary stage of transition

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towards that more perfect state—that fitness for more complex duties—which the heart attains when the bird is born to breathe with lungs in the open air.

But I would descend yet lower, and, magnifying the wonders of these plans for the future, by diminishing (as it may seem to some) the importance of the objects in which they are displayed, would trace the development of a single blood-cell in a tadpole, *i.e.*, in the young fish-like embryo of a frog, such as nearly every pool would supply in the spring time, and such as magnified sketches would fully illustrate.

By a blood-cell, I mean one of those microscopic particles by which the blood is coloured red—particles so minute, that, in our own blood, about ten millions might lie on a square inch of surface.

In the earliest period of active life of these tadpoles, the little black and fish-like body is composed almost wholly of minute cells, among which you can trace, with even powerful microscopes, scarce any difference. You could not tell the future destiny of any of them by their present characters—they look all alike. But presently, as they increase in number, a differencing begins among them, and a sorting of them; and some arrange themselves for a spinal column, and some for muscles; and some are seen to be placed where the first streams of blood are to run, and some are clustered where the heart will be. At first those that are to be blood-cells are round and darkly shaded, and contain yellowish particles, many of which are like four-sided crystals of some fatty substance. But, in a day or two, the cells begin to move and circulate in the channels in which they were arranged; and then, as we watch them day by day, they gradually change. The particles within them become smaller and less numerous, and collect near to their borders, while their centres, clearing up, show an enclosed smaller body or nucleus. Moreover, as these changes proceed, the cells which were before colourless, acquire gradually a deeper and deeper blood tint, and exchange their round for an oval shape, till, by the time that all the particles they first contained are cleared away, as if by solution, they have become perfect blood-cells, nearly like those which colour the blood of the completely-developed frog.

The time required for these changes depends much on the temperature and degree of light to which the creature is exposed. It may vary from one to three or more weeks; and we can thus deliberately watch the development of a blood-cell, day by day, until it reaches that which we may call its perfection. In this state the cells abide for a time unchanging, and then decline and give place to another set of blood-cells, each of which is developed through a series of changes different, indeed, from those that I have described, but not less numerous or complex.

Now, such is the life, up to the period of perfection, of every blood-cell in this trivial creature. And so it is in ourselves. Of the millions of those cells that colour our blood, not one reaches its perfection but through changes as numerous and as great as these.

Perhaps the wonder is augmented if we think that, in the embryo, the changes proceed with equal steps, in all the cells at once: there is exact concert among them; if I may so speak, they all keep time. Nor is the harmony limited to them: for their development is exactly adjusted to that of every other part; successive changes are exactly concurrent in every part at once; so that, though all are continually changing, they never lose their mutual fitness.

I might cite more instances of these plans for futurity, but they are nearly infinite; for in truth (and what a moral there is in such a truth!)

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in the living world, nothing is made at once fit for the highest purposes of which it may be capable. In all the countless crowds of living beings—in all the countless particles of each—there is not one but in the history of its life we may read a gradual attainment of its highest destiny: not one but has a time in which its true purpose is yet future, its true design yet unfilled; and although, even in its rudiment it is not useless, yet there will be a time when, with higher powers, it will take part in the designs of some more perfect state. So wide is that law which has its highest instance in the history and future destiny of man himself.

But the evidence of the design of living bodies for conditions that are yet future, seems to culminate in the proofs of their capacity to repair injuries and to recover from diseases.

It is surely only because it is so familiar that we think lightly, if at all, of the fact that living bodies are capable of repairing most of the injuries they may sustain; and that, in this capacity, they show that provision has been made in them for events of which it is not certain whether they will ever occur to them or not. When we contemplate the perfect living body, the exact fitness of every part for its office, not as an independent agent, but as one whose work must be done in due proportion with that of many others, is a very marvellous thing; but it seems much more marvellous that, in the embryo, each of these parts was made fit for offices and relations that were then future. But surely more marvellous than all it is, that each of these, when perfect, should still have capacity for right action in events that are not only future, but unlikely; that are indeed possible, but are in only so low a degree probable, that if ever they happen they will be called accidents—as things not to be expected or provided for.

Let me describe a process of repair, and describe it so simply, as it might be to school-boys:—

All know, or can feel, their Achilles-tendons behind their ankles, and that these, strong as they are, are sometimes broken by a violent contraction of their muscles. I know not how small—how almost infinitely small—the chance is that any given man or quadruped would ever break this or any other part; but small as the chance may be, ample provision is made for its repair. How this is accomplished may be again illustrated by diagrams.

When the tendon in such an animal as the rabbit is divided, its pieces separate to nearly an inch apart, the upper piece being drawn up by the unrestricted action of its muscles. The muscles, no longer fastened by the tendon to the heel-bone, are thus rendered useless; and the object of the reparative process must be to form a bond of connexion between the separated pieces of the tendon.

In the two days following such an injury, all the structures between and around the ends of the divided tendon appear soaked with a half-liquid substance, the product of inflammation. And thus far we see no plan for uniting the separated pieces; there is no more of this new substance in the line between them than there is around them; and all the new substance appears alike. But in the course of two days more, we find that fresh material is deposited between the separated pieces of the tendons, and that it is firmer than that around, and has firm hold on the ends of the separated pieces, and connects them, though as yet (if I may so say) only clumsily. After this, however, each day finds the connecting substance becoming firmer, tougher, and more like the texture of the tendon itself. Each day, too, it becomes more defined from the surrounding parts; and this it does, not only because itself becomes more exactly shaped, but because they regain their natural

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texture. And observe the distinct design which is shown in this contrast. At first, all the parts at and about the seat of injury were soaked with a similar material; but now that portion of this material which lay in the place for the formation of the connecting bond, has remained and contributed to the repair; but that portion of it which was more remote, and could serve no useful purpose, has been cleared away.

At the end of a week, in the rabbit, a complete cord-like bond of union is formed, and the muscles can act again. By this time, too, the bond has gained nearly the perfect texture and the toughness of the original tendon. I once tried the strength of such a bond of connexion, which had been forming for ten days after the division of the Achilles tendon of a young rabbit. Having removed it from the dead body, I suspended weights upon it, and, after bearing weights of twenty, thirty, forty, and fifty pounds, it was at length broken by a weight of fifty-six pounds. But surely the strength it showed was very wonderful, if we remember that it was not more than the sixth of an inch in its greatest thickness, and that it was wholly formed in ten days, in the leg of a rabbit scarcely more than a pound in weight.

I might illustrate the process of repair by instances as perfect as these, observed after injuries of many, almost of any, parts. And I might, as in the instance of development, magnify its excellence by showing it in what we are apt to call trivial creatures, or even by showing that, in general, those lower species of animals, that have least means of escape or defence from mutilation, appear to be endowed with the most ample powers of repair. But time will not permit this, nor yet that I should show how many lessons of practical utility might be engrafted on the teaching of a process such as this, or how the main principles of the surgery of injuries are based on the recognition of the natural power of recovery. Nearly its whole practice consists in the prevention of any interference, with that to which there is, in the very nature of the body, as great a tendency, as there is for the embryo to be developed into the perfect creature. Using the facts of the reparative process only for the present purpose of showing how physiology might be taught as the chief science of designs, I would say that the arguments of design, which are here displayed, are such as cannot be impugned by the suspicion, that the events among which each living thing is cast have determined its adaptation to them; because the adaptations here noted prove capacities for things that are future and only not impossible.

I will mention but one more instance of general design which I think should not be omitted in the teaching of physiology to whatever class of students—that, namely, of the adaptation of animals in their decay; how as they do not live, so neither do they decay or die, for themselves alone, but ministering to others' good.

The chief evidence of this is in the provision that the decaying parts of animals yield the materials from which the vegetable kingdom derives its chief supply of food. In the ordinary decomposition of the dead body, many of the products are the very materials from which, as they are mingled with the earth and atmosphere, each plant takes its food. But it is not alone through this decay in death, that animals restore to the vegetable world the materials which they have, for their own food, derived from it. The same rule is fulfilled in the decay of life, *i. e.* in those changes which occur when the particles of the animal body, having served their purpose, or lived their full time in it, are then to be cast out as refuse. For in all these changes, which are a part of that constant mutation of particles through which the body remains, through all the time of vigorous life, the same, though continually changing—in all these, the material which is passing out, as refuse, gradually approximates, in its transition, to the inorganic state of matter. It is so with the carbonic acid, and other exhalations from the lungs and skin, and with all the class of substances excreted. And thus, every form of degeneration or decay, whether in life or after death, may be described as a series of changes, through which the elements of organic bodies, instead of being on a sudden and with violence dispersed, are gradually collected into those lower combinations in which they may best rejoin the inorganic world; they are such changes, that every creature may be said to decay and die, and cast out its refuse in the form which may best fit it to discharge its share in the economy of the world,—either by supplying nutriment to other organisms, or by taking its right part in the adjustment of the balance held between the organic and inorganic masses.

I have thus endeavoured to fulfil my office, and to show how the general teaching of physiology might do good among its students. I think its advantages are such as might be apprehended by students of all classes in society. I suppose, too, that for all that part of it which can be applied in the maintenance of health the merit of utility would be admitted; and that, in general terms, it would be allowed that the study of designs and final causes should be mingled with other studies in any scheme of education by which it is proposed that the whole mind should be disciplined, and all modes of reasoning should be taught.

But still, the question may be asked, is it possible that knowledge such as this, of the methods of design, will rest with any influence in a mind that must be engrossed in urgent business, or in household cares; harassed, perhaps, in struggles against poverty, or dissipated in the luxuries of wealth? It may be very well (some will say) to teach these things to the young, but men and women have other works and other pleasures to pursue.

I know all this; and I have overshot my mark if I have urged any teaching of which the effects would interfere with devotion to the necessary works of later life. But I suppose that if any one will watch his thoughts for a few days, or even a few hours, he will find that however engrossing may be his cares or his pleasures, however earnest his attention to what seems his most urgent need, there are yet intermingling trains of thought quite alien from these—trains into which the mind falls, it knows not how, but in which it will wander, as if resolute to refresh itself. Now these must be provided for; *and so it must be an object of all education to supply, in early life, those studies from which, in later years, may arise reflections that may mingle happily with the business thoughts of common days;* that may suggest to the reason, or even to the imagination, some hidden meaning, some future purpose, some noble end, in the things about us. *Reflections such as these being interwoven with our common thoughts, may often bring to our life a tone of joy, which its general aspect would not wear; like brilliant threads shot through the texture of some sombre fabric, giving lustre to its darkness.* But besides this happy influence of the general impressions that might remain in the mind from the early teaching of physiology, I claim for it the hope that its principles might read to some minds lessons of the truest wisdom.

The student of Nature's purposes should surely be averse from leading a purposeless existence. Watching design in every thing around him, he could not fail, one would think, to reflect often on the purpose of his own existence. And doing so, if his mind were imbued with the knowledge of the mutual fitness in which all the members of his body, and all the parts of the whole organic world, subsist and minis-

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ter to each other's good, he could not conclude that he exists for his own sake alone, or that happiness would be found separate from the offices of mutual help and of universal good will. One who is conversant with things that have a purpose in the future higher than that which they have yet fulfilled, would never think that his own highest destiny is yet achieved. Though his place among men might be only like that of a single particle—like that of a single blood-cell of the body—yet would he strive to concur, and take his share, in all progressive good. Nor would he count that with this life ended his purpose would be attained; but by teaching, or by record, or by some other of those means, through which, in the history of our race, things that in their rudiments seemed trivial have been developed into great results, he would strive to "achieve, at least, some useful work, the fruit whereof might abide." Conscious of an immortal nature, and of desires and capacities for knowledge, which cannot be satisfied in this world, he would be sure that the great law of progress from a lower to a higher state would not be abrogated in the divine government of that part of him which cannot perish, and is not yet perfect. In him, even the understanding would be assured that, "as we have borne the image of the earthy, we shall also bear the image of the heavenly;" for that is the true lesson of development.

And because it abounds in lessons such as these, I claim for physiology the pre-eminence among all sciences, for the clear and full analogies which it displays between truths natural and revealed: and I would teach it everywhere; looking to its help, by these analogies, to prove the concord between knowledge and belief, and to mediate in the ever-pending conflict of intellect and faith.—*Paget.*

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